

Beaverton Cultural Center Feasibility

Prepared for

Beaverton Arts Foundation

by

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Beaverton Cultural Center Feasibility: Summary

BACKGROUND

The Portland metropolitan area has a lively and diverse performing arts scene, with numerous artists and organizations producing a wide range of performance events in facilities that range from community theaters and neighborhood clubs to large-scale concert halls. The bulk of this activity occurs in and around downtown Portland, in part because of a lack of performing arts facilities in other areas of the metropolitan region. Facilities in the western portion of metropolitan Portland, including Beaverton and Hillsboro, are limited to small rooms in community centers, libraries, and similar facilities that were not constructed to support the performing arts. Outside of high school auditoriums, which are used for school-related activities, there are no performing art facilities in Beaverton or Hillsboro with the size and features to adequately support most performance events.

FACILITY VISION

The lack of performing arts facilities in Westside Portland had led the Beaverton Arts Foundation to make the establishment of a performing and visual arts center in Beaverton their highest priority. The Foundation has proposed construction of a Beaverton Cultural Center that would include a theater with stage and fixed seating for 600, flexible space for classrooms and meetings, and gallery space in the lobby or in a separate room. The Foundation envisions a state of the art facility with cable access, sound, lighting, and the ability to update technology as needed. The Beaverton Cultural Center would also have a kitchen to support catering service, other support space, and possibly retail space for the sale of art.

PURPOSE OF THIS STUDY

The Foundation's planning for the Beaverton Cultural Center has focused on the physical characteristics needed to support events, its ownership, and potential partners for development or operation of the facility. The Foundation contracted with ECONorthwest and LMN Architects to help answer several questions that must be addressed before the Foundation can embark on a fundraising campaign. These questions include:

- Is the type and size of facility specified in the Foundation's vision appropriate for potential users that are interested in using the facility?
- How much use will the facility get, and what will groups pay to use it?

- What will it cost to build and operate a facility?
- How can those costs be funded?
- What measures can be taken to increase the financial feasibility of the facility?

KEY FINDINGS

To answer these questions, ECONorthwest and LMN Architects conducted a preliminary evaluation of the likely financial performance, design, and capital cost of the proposed Beaverton Cultural Center. This preliminary evaluation is intended to quickly get to answers to these outstanding questions. Key findings of this evaluation include the following:

- There is strong demand for a performing arts facility in the Beaverton area for performances and as rehearsal space.
- A 600-seat facility is about the right size for most performing arts groups.
- Desired facility characteristics include a stage that is 40' wide at the proscenium and 50–60' deep, with lighting similar to that found in professional theaters, a fly tower for dropping scenery, an orchestra pit, multiple dressing rooms, good acoustics, a truck-high loading dock, and backstage storage space.
- Over half of the groups we interviewed for this study said that they would consider paying about \$400 to \$800 per show to use the proposed Beaverton Cultural Center. These organizations also expect to pay fees for services and special equipment, which is fairly standard for performing arts facilities.
- As with performing arts, there is little space for the display of visual arts in Washington County. Visual art display is unlikely to generate substantial revenue for operation of the Beaverton Cultural Center, but will benefit the Center by increasing public use of the facility and encouraging contributions by supporters of the visual arts.
- Meeting planners and Visitor Bureau staff interviewed for this study said that there is a shortage of meeting space in Washington County, especially for larger groups with 50 to 500 people. Based on the comments we received, we expect there to be strong interest in using the Beaverton Cultural Center for meetings, receptions, and other events.

FACILITY DESIGN AND CONSTRUCTION COSTS

The Design Program developed by LMN Architects (see Appendix A) provides a detailed cost estimate for the proposed Beaverton Cultural Facility. The Design Program estimated costs for two types of facilities:

- A Performing Arts Center concept, which includes a proscenium stage with a fly tower and orchestra pit, would cost \$20.7 to \$21.2 million in 2004 dollars.
- A Community Auditorium concept, which would have an auditorium stage without the fly tower and orchestra pit, would \$15.6 to \$16.4 million in 2004 dollars.

Both of these concepts would have a 600-seat sloped-floor theater with lighting equipment, multi-purpose meeting and classroom space, a visual arts gallery, lobby, and support space. The primary difference between the two concepts is the range of performances they support. The Performing Arts Center would have an industry-standard stage for a full range of productions. The Community Auditorium stage would not have a fly tower or orchestra pit, limiting its use for theater, dance, and similar productions that use drop scenery or live music accompaniment.

We asked LMN Architects to estimate the cost of a smaller facility, and consulted recent studies for facilities in other areas to estimate a range of facility types and corresponding construction costs:

- Reducing the number of seats to 400 in either the Performing Arts Center or Community Auditorium concept would reduce construction costs by \$2.5 to \$2.75 million.
- A smaller scale facility with a flat-floor multi-purpose hall that has capacity for 440 seats on retractable risers and associated support space could be built for \$10 million. A classroom and exhibit wing could be added to the core project without increasing lobby and restroom space for approximately \$2.5 million. The total project cost in 2004 dollars would be \$12.5 million.
- The City of Gresham is considering construction of a Community Center that would include a flexible flat-floor space with seating on retractable risers that could serve as a 300-seat theater or meeting space. A feasibility study conducted for this proposed facility estimates the cost of the theater/education building would be \$11.4 million.

FINANCIAL PERFORMANCE

We used the responses to our survey of arts groups, use and fees at other performing arts facilities in the Portland area, and other sources to make assumptions about the level of use, fees, and operating costs at the proposed Beaverton Cultural Center in a stable year of operation (typically 3–5 years

after opening). Our evaluation of financial operation of the facility is based on the Performing Arts Center concept. Table 1 shows the results of our estimates of operating revenue, costs, and net operating revenue based on these assumptions.

Table 1 shows that we expect the Beaverton Cultural Center to cover 57% of its total operating costs from revenue generated by use of the facility for performances, meetings, and similar events. The remaining 43% of operating costs, or \$188,610, will need to come from grants, contribution, endowment interest, public funding, or other sources. The remainder of this report describes our methods, findings, and results in more detail.

Table 1. Operating revenue, costs, and net operating revenue at the Beaverton Cultural Center, stable-year operation (2003 dollars)

Revenue/Cost Category	Amount
Total Revenue	\$248,890
Performances and rehearsals	\$119,790
Meetings and receptions	\$56,100
Patron use surcharge	\$66,000
Catering commission	\$7,000
Total Costs	\$437,500
Labor	\$227,500
Administrative overhead	\$50,000
Building operation	\$140,000
Set-aside for capital improvements	\$20,000
Net operating revenue	-\$188,610

Source: ECONorthwest.

The Community Auditorium concept developed by LMN Architects would not have a fly tower or orchestra pit, which would limit its use by groups that require drop scenery or live music accompaniment for their productions. Such a facility would receive less use and command lower fees than the Performing Arts Center concept. Operating costs for the Community Auditorium concept, however, would be much the same as shown in Table 1, because it would have roughly the same building size and require a similar level of staffing. Compared to the estimates in Table 1, we expect lost revenue for the Community Auditorium concept to exceed any operating cost savings. Thus, such a facility would perform worse than the Performing Arts Center concept in terms of cost recovery and net operating revenue.

Reducing the number of seats to 400 in the Performing Arts Center or Community Auditorium concept would have a similar effect on financial operation—revenues would decline relative to the level shown in Table 1 from fewer performances, fewer attendees, and lower fees, while operating costs would be similar, resulting in poorer financial performance relative to a 600-seat hall.

The feasibility study for the proposed Gresham Community Center estimates their total operating cost at about \$445,000. Cost recovery for the proposed Community Center in Gresham was estimated at 75% or about

\$335,000, resulting in a operating deficit of \$110,000. However, revenue at the Gresham facility includes heavy use by City parks and recreation programs. This facility would probably not generate as much revenue without these City programs, resulting in poorer financial performance than estimated in the feasibility study.

PURPOSE OF THIS REPORT

The City of Beaverton established the Beaverton Arts Commission in 1983. In 1999 the Commission formed the private non-profit Beaverton Arts Foundation. Its main purpose is to raise funds to support the programming of the Beaverton Arts Commission. Its highest goal is to establish a performance and visual arts center in the Beaverton community.

To date, planning such a facility has focused on the physical characteristics needed to support events, its ownership, and potential partners for development or operation of the facility. Several questions must be addressed before the Foundation can embark on a fundraising campaign:

- Is the type and size of facility specified in the Foundation's vision appropriate for arts groups and other potential users that are interested in using the facility?
- How much use will the facility get, and what will groups pay to use it?
- What will it cost to build and operate a facility?
- How can those costs be funded?
- What measures can be taken to increase the financial feasibility of the facility?

To answer these questions, the Beaverton Arts Foundation contracted with ECONorthwest and LMN Architects to conduct a preliminary evaluation of the likely financial performance, design, and capital cost of the proposed Beaverton Cultural Center. This preliminary evaluation is intended to quickly get to answers to these outstanding questions at a low cost to the Foundation. To accomplish this, the evaluation in this report relies heavily on the professional experience of ECONorthwest and LMN Architects, key-person interviews, and the performance of similar facilities. Based on the outcome of this evaluation, the Foundation may decide to invest in a more detailed analysis of the design and feasibility of the proposed Beaverton Cultural Center.

ECONorthwest and LMN Architects completed a draft feasibility study for the Foundation in December 2002. Members of the Foundation met with Terry Moore and Mike Gleason of ECONorthwest in March 2004 to discuss our findings. This final report reflects comments from the Foundation's review of our December draft report.

BACKGROUND

The City of Beaverton established the Beaverton Arts Commission in 1983. Since that time the Commission has presented thousands of visual and performing arts events in the community. Continued support for the arts is shown in part through City's funding of administrative costs for the Commission and private support for programs through donations, sponsorships, grants, and art and ticket sales.

Many events supported by the Beaverton Arts Commission have been held in courtyards, parks, recreation centers, malls, and churches. These facilities were not built for the performing arts. They lack adequate stage and backstage area, lighting, acoustics, audio and visual equipment, and proper seating for audience members. Beaverton and Westside Portland in general lack facilities created specifically for performing art events such as theater, dance, and music.

Obviously a new performing arts facility would better serve existing events and allow larger and more types of events to occur in Beaverton. The need for such a facility was acknowledged in Beaverton's Economic Development Strategic Plan, which set the objective of developing a multipurpose facility that supports both business and cultural activities. Such a multipurpose center would further the City's goal of creating a vibrant city that is a great place to run a business and raise a family.

Not surprisingly, a performing arts center is also supported by Beaverton's arts community. In 1999 members of the Beaverton Arts Commission formed the private non-profit Beaverton Arts Foundation. Its main purpose is to raise funds to support the programming of the Beaverton Arts Commission. Its highest goal is to secure a performance and visual arts center in the Beaverton community. The Foundation believes strongly that the quality of life in Beaverton would be greatly enhanced by having a center where children can perform their emerging talents, ethnic communities can share their cultural expressions and exceptional artists can share their artistry and unique perspectives about our world with the community.

FACILITY VISION

The Beaverton Arts Foundation has developed a vision for a performing and visual arts facility. In the rest of this report we refer to that facility as the Beaverton Cultural Center. The vision for a Beaverton Cultural Center includes a theater with stage and fixed seating for 600, flexible space for classrooms and meetings, and gallery space in the lobby or in a separate room. The Foundation envisions a state of the art facility with cable access, sound, lighting, and the ability to update technology as needed. The Beaverton Cultural Center would also have a kitchen to support catering service, other support space, and possibly retail space for the sale of art.

The Foundation expects that the Beaverton Cultural Center will be built and operated by a separate private non-profit corporation formed for that

purpose. This non-profit would be supported through revenue generation, partnerships, and private support. The Foundation wants to develop a facility that will not need to rely on taxes. To maximize revenue generation, the Beaverton Cultural Center should have flexible space that can accommodate a wide range of events including performing arts, meetings, trainings, receptions, gallery showings, ceremonies, classes, and similar events.

The Beaverton Arts Foundation has identified potential partnerships for development or operation of the Beaverton Cultural Center. One potential partner is the Beaverton Arts and Communication Magnet Academy (ACMA), an options program of the Beaverton School District for students grade 8-12. In addition to the core academic curriculum, students are able to participate in specialized performing, visual and communication arts integrated programs. The Academy and the District have a strong interest in developing a performance/visual arts space in Beaverton so that their students have an adequate stage on which to perform.

There may be space to develop the Beaverton Cultural Center near the ACMA campus. ACMA is located on Center St. just west of Highway 217, within a quarter-mile of the Beaverton Transit Center. Proximity to the ACMA would allow students to use the Beaverton Cultural Center during school hours and after hours for events. It also creates the potential for co-management or other financial cooperation between the school district and the non-profit operating the Beaverton Cultural Center. Such a cooperative arrangement would have clear operating agreement covering school and community use.

The Tualatin Hills Park and Recreation District (THPRD) is another potential partner in developing or operating the Beaverton Cultural Center. The THPRD serves residents in the Beaverton area, and it has facilities that can be used for events including several recreation centers, the Jenkins Estate, and Fanno Farmhouse. Most of the District's recreation centers are in former school buildings or other second-hand space that was not built to support performing arts events, meetings, receptions, and similar events. Participating in the development or operation of the Beaverton Cultural Center would help THPRD better serve District residents.

LMN Architects developed two concepts for the Beaverton Cultural Center based on the facility vision described by the Beaverton Arts Foundation. A Performing Arts Center concept would have a fully-equipped professional 600-seat theater, with flexible meeting/classroom space, a gallery, and support spaces. The Community Auditorium concept would have many of the same features but the performance area would have less equipment and capabilities than in the Performing Arts Center concept. Each of these concepts are based on the design and cost of comparable facilities. The full analysis by LMN Architects is included as Appendix A of this report.

ORGANIZATION OF THIS REPORT

This report summarizes the results of our evaluation, organized as follows:

- **Chapter 2** addresses the demand for performance, meeting, and visual arts space in Beaverton. This chapter identifies potential partners that may assist with development or operation of the Cultural Center, and summarizes contacts with performing arts groups and representatives of other potential users of the facility.
- **Chapter 3** looks at the supply of performance, meeting, and visual arts space in the Beaverton area, including their fees for use and appropriateness for various types of events. Chapter 3 also reports use and rental rates for Portland-area facilities that are similar to the proposed Beaverton Cultural Center.
- **Chapter 4** estimates financial performance of the facility. Revenue generated by use of the Cultural Center is estimated from projected use and fees. We compare this revenue to estimated operating costs to show the share of operating costs funded by user-generated revenue. Costs not funded by user-generated revenue will need to be funded by private donations, partnerships, and other sources. Chapter 4 also reports the estimated capital costs to construct the Cultural Center.
- **Appendix A** presents the full report by LMN Architects, *Beaverton Cultural Center: Summary and Design Program*.

Demand for Performance, Display, and Meeting Space

POTENTIAL PARTNERS AND SUPPORTING ORGANIZATIONS

The Beaverton Arts Foundation has identified two potential partners for development or operation of the Beaverton Cultural Center: the Beaverton Arts and Communication Magnet Academy (ACMA), an options program of the Beaverton School District for students grade 8-12, and the Tualatin Hills Park and Recreation District (THPRD). The ACMA has the potential to generate demand for the Cultural Center as a venue for student performances whether or not the Beaverton School District is a partner in development or operation of the Center. The THPRD would not itself generate demand for the Cultural Center, but financial participation by the THPRD in development or operation of the Cultural Center may allow District residents to use the facility at a discounted rate.

PERFORMING ARTS SPACE

The Portland metropolitan area has hundreds of performing arts organizations, and many of these groups may be interested in using space at the proposed Beaverton Cultural Center. The limited budget for this assessment will not allow an exhaustive survey of all performing arts groups to ask about their interest in using the proposed facilities. For this reason, ECONorthwest sought to interview a limited number of groups that represent a range of the performing arts.

Early in the process of identifying groups to interview, we became aware that the Sisters of St. Mary of Oregon (the Sisters) had conducted a survey of performing arts organizations in 2002 for a proposed theater at their Valley Catholic School campus in Beaverton. Dave Rianda, who conducted this survey, graciously agreed to share the results with ECONorthwest. We begin this section with a summary of findings from the Sisters' 2002 survey, followed by a summary of findings from our interviews with organizations.

We identified performing arts groups to interview from the list of respondents to the Sisters' survey; we selected groups that indicated interest in performing arts space in Washington County. We also contacted groups suggested by the Beaverton Arts Council, and groups we contacted suggested other groups to contact. In addition to interviewing arts groups, facility managers contacted for the supply analysis in Chapter 3 had insights into the demand for performing arts space, and we have incorporated their comments into our summary of interviews that follows the Sisters' survey.

SISTERS SURVEY RESULTS

The Sisters of St. Mary of Oregon (the Sisters) commissioned a Survey of Performing Arts Organizations in 2002. The Sisters considered building a performing arts center¹ on their Valley Catholic School campus in Beaverton, and sent a survey to 198 performance groups in the tri-county Portland area to ask about their need for performance space in Washington County. Table 2-1 shows the number of responses by type of performing arts group.

Table 2-1. Respondents by type of organization

Type of Group	Responses	
Theater	13	32%
Dance	11	27%
Instrumental	10	24%
Choral	6	15%
All of the above	1	2%
Total	41	100%

Source: Sisters of St. Mary of Oregon,
2002 Survey of Performing Arts
Survey results provided by Dave Rianda.

Respondents were asked to rate their preference for an auditorium in Washington County on a scale of 1 to 5 where 1 indicated that Washington County was the most preferred location and 5 indicated that Washington County was the least preferred location. Table 2-2 shows that half of the respondents (21) had a strong preference for a Washington County location (rating of 1 or 2).

Table 2-2. Rating of Washington County as a preferred location for a performance arts facility

Rating	Responses	
1 (Preferred)	16	39%
2	5	12%
3	7	17%
4	2	5%
5 (Not preferred)	5	12%
No response	6	15%
Total	41	100%

Source: Sisters of St. Mary of Oregon 2002 Survey
of Performing Arts Organizations provided by Dave Rianda.

Respondents were asked about the size of venue they preferred. Three respondents said that they preferred a facility that seats 1,500 to 3,000, and the rest of respondents preferred a facility that seats between 417 and 515 people. The preferred stage dimensions ranged from 20 feet by 30 feet (600

¹ According to Dave Rianda, the Sisters indefinitely postponed planning and fundraising for a performing arts center in 2002 to concentrate on fundraising for other capital improvements on the campus.

square feet) to 75 feet by 50 feet (3,750 square feet). The overall recommendation of the Sisters' survey was for a stage 40 feet by 40 feet (1,600 square feet) that could accommodate a 170-member vocal group or 60 musicians with instruments including a grand piano. Height and backstage wing space may factor into the overall space requirements of facility users.

INTERVIEWS WITH ARTS ORGANIZATIONS

ECO interviewed thirteen organizations to inquire about their interest in a performing arts facility in the Beaverton area. These organizations, and the type of performances they produce, are:

- Beaverton Community Band (music)
- Broadway Rose Theater (theater)
- Do Jump! (dance)
- Friends of Chamber Music (music)
- Oregon Chorale (music)
- Oregon Symphonic Band (music)
- Phoenix Theater Company (theater)
- Portland Community Ballet (dance)
- Portland Symphonic Choir (music)
- Portland Taiko (music)
- RASIKA (dance)
- St. Mary's of the Valley (theater)
- Tears of Joy Theater (puppet theater)

These organizations do not represent an exhaustive list of organizations that may be interested in performance space. Instead, we focused on organizations that indicated in the Sisters survey that they were interested in new performing arts space in Washington County and organizations suggested by the Beaverton Arts Council. The organizations contacted by ECO produce performing arts events including music, theater, and dance. All but one of the organizations indicated that they are actively looking for new performance space in the Beaverton area, or would consider performing in a Beaverton location at least one time per year.

Performing arts organization representatives interviewed for this study were asked a series of questions regarding the number of performers in a typical production, the size of audiences, the attributes of their ideal

performance venue, and the factors they consider when deciding on a performance venue. Key interview findings are summarized below.

CURRENT PERFORMANCE LOCATIONS AND COSTS

Eight out of twelve organizations we interviewed said they would be interested in using the type of performing arts space proposed for the Beaverton Cultural Center. One of the remaining four organizations, the Friends of Chamber Music, said that 600 seats is too small—they need 800 seats in order to cover the artist’s fees. The other three organizations either have their own space, are a resident company at another facility, or are content with their current space.

St. Marys of the Valley has their own auditorium at their Valley High School campus. This auditorium seats 375, and they are interested in using a larger facility for their student theatrical productions.

Seven out of twelve organizations said they use school auditoriums for performances, particularly Tigard, Hillsboro, and Parkrose high schools. Several of these organizations also use churches and other informal performance space. These organizations report that the cost of these facilities is low, ranging from free to \$400.²

Four organizations report using performing arts facilities at Portland State University (Lincoln Hall), the Portland Center for the Performing Arts (Winningstad Theater and Newmark Hall), and the Portland Community College Sylvania campus. The reported cost for these facilities is \$400 to \$650 per performance. Chapter 3 presents more information on rental rates at performing arts facilities in the Portland area.

Many organizations we interviewed stressed that they have limited budgets and cannot afford an expensive space.

IDEAL PERFORMANCE SPACE

ECONorthwest asked organization representatives what their ideal performance space would be for their organization. We asked specifically about stage size, number of seats, lighting, backstage space, fly tower for sets, orchestra pit requirements, and any other space requirements that they required.

Stage size

The stage size needed for a production depends on the number of performers and the type of performance. Most dance and theater organizations we interviewed have 2 to 36 performers, except for the Portland

² Many of the people we spoke too did not know the cost of performance facilities they used, or were unwilling to tell us. Chapter 3 reports rental rates at selected performance facilities in the Portland area.

Community Ballet which has over 100 dancers on stage at once for some performances. Three of the five music organizations we interviewed have 55 to 65 performers with instruments on stage.

A facility manager said that the best stage size for orchestral, band, and theatrical events is 40' wide at the proscenium and 50–60' deep, including room for a band shell or backdrops. A stage this size would accommodate most of the larger bands that we interviewed. Dance events can use a smaller stage, generally 40' wide and 30–40' deep. Several organizations specified the size of stage they need:

- The Oregon Symphonic Band, with 60 to 65 performers, needs a stage 40' wide by 60' deep.
- The Portland Community Ballet, with up to 100 performers, needs a stage at least 30' wide by 40' deep but prefers a stage 40' by 40'.
- Portland Taiko needs a stage at least 30' wide by 25' deep.

Seating

Nine out of twelve organizations said that their largest audience was in the 350 to 750 range. Several organizations said that the size of their audience depends on the size of the facility—they can sell out larger halls for some events. Two organizations said their largest events are attended by 1,000 to 1,500 people, but one of these said their average audience size is 250 to 400. One theatrical organization said they limit their audience to 99 to avoid equity (union) actors.

The proposed Beaverton Cultural Center would have 600 seats. Average attendance at shows indicates that a 600-seat facility would be a good fit for most of the organizations we interviewed.

An important consideration for theatrical events is royalties paid to authors and publishers, which is based on the total number of seats in the house. For this reason, theatrical organizations look for a hall that closely matches the audience they expect to draw—a theatrical company that expects shows to draw no more than 300 people would prefer a hall with 300 seats. Three out of four theatrical organizations we interviewed said they have an average audience size of 250 to 600, indicating that a 600-seat hall would work for all but the smaller shows produced by these organizations.

Lighting

Nine out of twelve organizations who told us their lighting requirements said they need lighting similar to that found in professional theaters and high-quality performing arts centers. Halls at the Portland Center for the Performing Arts, especially the Winningstad Theater, were mentioned as examples of facilities with good lighting systems. Professional-quality lighting includes lighting racks in the fly space, house lighting, and spot

lights adjustable from a central control board. Two organizations requested specific lighting components: a cyclorama and gobo lights.³ Professional-quality lighting is particularly important for dance and theatrical productions. Music productions had simpler lighting needs, mostly stage lighting to illuminate the band and allow musicians to read their music.

Fly tower

A fly tower allows scenery to be “flown” up and down for quick set changes. Fly towers are a standard component of professional-quality theaters and high-quality performing arts centers. Many smaller facilities do not have a fly tower because of the expense—they require a building 70’ to 80’ tall.

Four out of eleven organizations—all dance and theater organizations—said they need a fly tower for dropping scenery. One of these organizations said that a fly tower is very important. Three organizations said that they use a fly tower only occasionally or that it is not essential, and four said they do not need a fly tower at all. Organizations that produce music performances do not need a fly tower, except one that occasionally produces a musical.

Orchestra pit

An orchestra pit is an area in front of the stage for musicians accompanying the performance on the stage. An orchestra pit is most often used by dance and theatrical groups that use live music but where the musicians themselves are not the focus of the performance. One organization stressed that the heads of the orchestra should be below the level of the stage.

Four out of eleven organizations said that they need an orchestra pit, with one indicating that it is very important. All of these groups produce theatrical, dance, or musical performances. Music organizations do not need an orchestra pit because all of their musical performers are on stage.

Backstage space

All of the dance and theater organizations we interviewed cited dressing rooms as important for their productions. These organizations said that a facility should have two “principal” dressing rooms for the lead performers, and two group dressing rooms for the rest of the performers (one each for male and female performers). These dressing rooms should each have their own bathrooms. The group dressing rooms should accommodate about 20 people each for all but one of the theatrical and dance performance by groups

³ A cyclorama casts an even light over a wide spread, useful for lighting drop scenery. A gobo light is a high-powered projector with a controllable mirror that can project patterns or images. Both of these lighting components are common in professional theaters and high-quality performing arts facilities.

we interviewed, and 50 people for the largest performance. These rooms would need to be roughly 500 to 1,250 square feet, assuming 25 square feet per person.

St. Mary's of the Valley, which is interested in a larger facility for its student theater performances, would like a facility with costuming space with laundry equipment.

All of the music organizations said that they need space backstage to store their instruments and cases. Several also said they need a "green room" to assemble before a show; this could be one of the dressing rooms used for theatrical performances. The Oregon Chorale needs space away from the audience where they can assemble and warm up before the show. Two organizations said they need a truck-high loading dock with large doors leading backstage. Portland Taiko also needs wing space for their large drums offstage.

Additional features

Several music organizations cited good acoustics as an important quality for a performing arts facility. Two music organizations said they need a band shell to better project their sound into the hall.

Accessibility was also cited as an important quality for a performing arts facility. Several organizations said that the facility should have plenty of parking, good transit access, and be easy to find. It should also fully comply or exceed the standards of the Americans with Disabilities Act.

Several theater and dance organizations mentioned the need for flexible space that can convert from a 600-seat auditorium to something smaller, or a separate smaller "black box" theater in the facility. This is because the 600-seate auditorium is too large for some events, and for use as rehearsal space. A "black box" theater is a studio theater with black walls used for smaller productions and rehearsals. This type of room is often flex space, with the floor serving as the "stage" and removable risers for the audience seats. This type of flex space can be converted back to a flat-floor room for rehearsals, classes, meetings, and similar events. For use as rehearsal space, this studio should have the same footprint at the auditorium stage, and a floor suitable for dance performances.

There were a variety of other special requests from organizations we interviewed: a sound booth, stage risers for musicians, and a trap door in the stage.

USE FOR PERFORMANCES AND REHEARSALS

Seven out of thirteen organizations we interviewed have several seasonal shows each year. Most dance and theatrical organizations perform shows over multiple weekends, while most music concerts are performed in one weekend. The Broadway Rose Theater Company produces 58 theatrical

performances each year, currently in the Tualatin and Tigard high schools auditoriums. This organization said that they currently do not pay for space, but their representative expressed some willingness to pay to use a performing arts facility.

Many of the shows produced by organizations we interviewed are seasonal. The most popular time of year to perform is the holiday season, but there are also shows in the spring, summer, and fall. St. Mary of the Valley said they would utilize the space during the school year only.

Four out of five music concerts require only several hours of rehearsal over 1 to 2 days. The Oregon Symphonic Band said that they need to rehearse over 4 days for each of their three series each year. Rehearsal time needed for dance and theatrical performances ranges from 2 days to 1 week before the show, with most organizations saying they need 3 to 5 days. If the Beaverton Cultural Center includes a “black box” studio theater, this could serve as rehearsal space for performances on the main stage. Facility managers said that the rehearsal space should have the same footprint (size and dimensions) of the main stage performance area. If the Beaverton Cultural Center does not have a studio theater, then some on-site rehearsals would be on the main stage making it unavailable for other uses.

Facility managers in the Portland area reported demand for rehearsal space by arts groups. Rehearsal space is so scarce that some groups use meeting halls and warehouses. The Beaverton Cultural Center could serve as rehearsal space for performances that are happening at other facilities.

The Beaverton Cultural Center is unlikely to host all of the performances or rehearsals by organizations we interviewed. All of the organizations we interviewed are currently using spaces that apparently work for them at some level. It is unlikely that all groups will shift all of their performances to a new facility. In addition, much of the rehearsal time required by organizations can happen off-site. Even with these caveats, however, the responses by organizations we interviewed indicates demand for a performing arts space in the Beaverton area, particularly on weekends for performances and weekdays for rehearsals.

WILLINGNESS TO PAY FOR SPACE

Eight out of the thirteen organizations we interviewed said that they currently pay to use a facility or would consider paying to use the proposed Beaverton Cultural Center. These organizations indicated they would be willing to pay about \$400 to \$800 per show to use a facility like that proposed for the Beaverton Cultural Center. These organizations also expect to pay fees for services and special equipment, which is fairly standard for performing arts facilities. The Phoenix Theater Company mentioned paying a percentage of ticket sales that would vary depending on services provided by the Center. This type of arrangement is also common for performing arts facilities.

The Broadway Rose Theater Company currently produces 58 performances per year at the Tualatin and Tigard high school auditoriums. This company said that they currently do not pay for performance space, but expressed a willingness to consider paying for space at the Beaverton Cultural Center

Chapter 3 provides more detail on the rental rates for other performing art facilities in the Portland area.

FACTORS THAT INFLUENCE THE DECISION TO CHOSE ONE PERFORMANCE SPACE OVER ANOTHER

According to interviewees, the three most important factors that influence an organizations decision to choose one performance space over another is acoustics, location, and the size of the stage. The musical organizations emphasized the need for good acoustics, and the larger organizations required large stages. Two organizations indicated that the cost of the facility was a deciding factor. Other factors mentioned were visibility, accessibility, parking, technical equipment, and ambiance.

DISPLAY SPACE FOR VISUAL ARTS

Many artists that produce visual arts such as painting, sculpture, pottery, prints, and textiles rely on galleries and other public spaces to display and sell their art. Spaces for the display of visual arts includes private galleries, cooperative galleries owned by artists, public spaces such as libraries and performing arts centers, and businesses such as coffee shops, bookstores, and restaurants.

As with the performing arts, the Portland area has a lively and active visual arts scene, with hundreds of private galleries as well as public museums that display art as well as displays in informal space such as public buildings and restaurants. And, as with performing arts, there is little space for the display of visual arts in Washington County (the supply of space for the visual arts is described in Chapter 3).

Given the scarcity of gallery and art exhibit space in Westside Portland, and the vibrant arts scene in the Portland area, we expect there to be strong demand for exhibit space at the Beaverton Cultural Center. This activity alone, however, is unlikely to generate substantial revenue for operation of the facility.

Private galleries that sell art typically take 40% of the sale price as their commission, with the remaining 60% going to the artists. Most gallery exhibitions in public buildings like the Beaverton Cultural Center do not have art for sale. Typically the artists for an exhibition in such spaces are chosen by a curator or jury for showing intended for display more than commerce. In these cases the facility generally does not receive any money for showing the art. When art is for sale in a space such as the Beaverton Cultural Center, the facility typically takes only 30% or less of the sale price

as commission. Operating budgets for facilities similar to the Beaverton Cultural Center show revenue from art commissions generating no more than \$2,000 per year.

Gallery and exhibit space can benefit the Beaverton Cultural Center, however, by increasing public use of the facility, particularly at the opening of an exhibition. Serving the visual arts community in Beaverton will also help the proposed Cultural Center gain contributions from supporters of the visual arts. A quality display space for the visual arts should be designed for that purpose, with flexible hanging systems, climate control, and appropriate lighting. The space should be staffed to provide security and information about the art, particularly if the art is for sale.

MEETING AND EVENT SPACE

There are a wide ranges of meetings and similar events that could be accommodated in the proposed Beaverton Cultural Center, including public meetings and educational events, meetings convened by private businesses and associations, training sessions, award ceremonies, wedding receptions, banquets, and similar functions.

In order to determine the demand for meeting and event space, ECONorthwest interviewed three meeting planners⁴ and a representative of the Convention and Visitors Bureau of Washington County (the Bureau). We asked these contacts if they thought there was a shortage of space in Washington County, the types of organizations that need meeting space, the types of amenities and meeting space size requirements are in demand, the busiest season for meeting space, whether meeting participants require lodging, and rental rate information.

In general, the people we interviewed indicated that there is a shortage of meeting space in Washington County, especially for larger groups with 50 to 500 people. Two respondents noted the lack of meeting space that is not in a hotel. Hotels with meeting rooms sometimes require groups to rent hotel rooms or order food, which makes them less desirable to organizations that do not need overnight accommodations or that want to provide their own food.

The Bureau representative emphasized what he perceived as a shortage of meeting space in Washington County. He and another meeting planner said that the number and size of breakout room options were limited in the currently available facilities.

According to respondents, the primary facilities for meeting space in Washington County are the Greenwood Inn, Kingstad Meeting Center, local

⁴ ECONorthwest interviewed the following meeting planners: Mike Fisher, Update Management, Inc.; Roselie Ogremen, Beatty Group Intl.; Diane Lindsay, Ewe-Me and Co.; and Tim Morgan, Convention and Visitors Bureau of Washington County.

hospitals, Embassy Suites, the World Forestry Center, and community colleges. These locations offer a varying set of amenities including nearby lodging, catering, and meeting rooms.

Interviewees stated that there are a variety of organizations that might utilize space at the proposed Beaverton Cultural Center. Corporate groups, professional associations, educational organizations, community groups, and arts groups were listed as groups that look for meeting space in Washington County. A couple of the interviewees said that there was a lack of low-cost meeting space for non-profit and community groups in the area.

Staff at the Tualatin Hills Park and Recreation District said that their Jenkins Estate property is booked one year in advance for wedding receptions. District staff also said that they frequently get inquiries from people looking for reception space for 250 people but they don't have a facility with that capacity and don't have a recommendation for where else they can go in Washington County. Accommodating groups of 250 with banquet seating requires a room that is at least 2,500 square feet, or 10 square feet per person. The Kingstad Center in Beaverton has a main room with this capacity, but the focus of this facility is on meetings rather than receptions.

The most important amenities for meeting space include state of the art multi-media equipment, catering, and breakout rooms. Some local hotels offer the rental of InFocus projectors (generally used for PowerPoint presentations) at high rates. Almost everyone mentioned the need to provide food, either by providing it directly or by partnering with a catering service. Even if a caterer is used, a prep kitchen is necessary for gala events, box lunches, or preparing snacks. One respondent noted the lack of supply of dance recital space and other uses appropriate for an auditorium.

Most respondents indicated that December and January are slow months for meetings because of the holiday season in December, but December is a popular time for holiday parties and space for these events is scarce. A meeting planner that works primarily with professional associations indicated that summer is slow for events held by these associations. Another meeting planner that works with corporations said summer was her busiest season.

None of the meeting planners felt lodging and meeting space must be in the same building, though lodging should ideally be within walking distance to the meeting space. From our experience in working with conference and convention centers, lodging at or near the meeting facility is critical to attract large multi-day events. Interestingly, respondents to this survey suggested that there was a need for meeting space in Washington County unencumbered by requirements to purchase lodging or food. While many of the organizations looking for space attract participants from outside of the area, the Visitor Bureau provides accommodation search services for group lodging rates in Washington County.

Based on the comments from meeting planners and facility staff active in Washington County, we expect there to be strong interest in using the Beaverton Cultural Center for meetings, receptions, and other events. The fees that users will be willing to pay, however, will be limited by the fact that meeting space in hotels, restaurants, and community facilities is often free (although hotels and restaurants may require the purchase of food or lodging to use the space). Chapter 3 shows the rental rates of meeting and event facilities in the Beaverton area.

Supply of Performance, Display, and Meeting Space

There are a wide variety of public and private facilities in Washington County and metropolitan Portland for the types of performing art events, art exhibitions, and meetings that might occur at the Beaverton Cultural Center. This chapter describes the supply of facilities in the market that will compete with and complement the proposed Beaverton Cultural Center.

Other facilities will compete with the Cultural Center on price as well as the type and quality of space available. Prices at other facilities will, to some extent, limit the prices charged at the Cultural Center. But other facilities also complement the proposed Cultural Center by allowing a wide range of events to occur in the market. The Beaverton Cultural Center can best compliment existing facilities by offering space that differs in size, type, and quality from space that is already available.

This chapter characterizes the supply of facilities that will compete with and complement the Beaverton Cultural Center in terms of the size, type, amenity, and price of spaces available in the market. Our characterization is based on our interviews of facility managers, meeting planners, and visitor bureau staff. We report the specific characteristics of facilities that are comparable to the size and type of space proposed at the Beaverton Cultural Center. The price of space and level of use at comparable facilities will be a key consideration for estimating the level of use, price, and revenue at the Center in Chapter 4.

PERFORMING ARTS SPACE

The Portland metropolitan area has a large number of various performing arts events happening every week in dozens of theaters, concert halls, clubs, and other facilities in the area. Very few of these events, however, are happening in Westside Portland. Everyone we contacted for this study confirmed our initial perception that there is very little space for the performing arts in Washington County. The following section describes the supply of existing performing arts space in Washington County. This section is followed by a discussion of performing arts facilities in the Portland region, with a focus on a few key facilities that are comparable to the proposed Beaverton Cultural Center.

WASHINGTON COUNTY FACILITIES

The few performing arts events that are happening in the area are primarily in spaces that were not built for the performing arts or that have limitations on their use:

- The Manzanita Room is an auditorium in an old school that has been converted into Elsie Stuhr Senior Center, operated by the Tualatin Hills Park and Recreation District. This hall seats 150 comfortably and is used for two performing arts events each year: a children's theater play and a choral concert. The room is also rented out for receptions and birthday parties in addition to being used for District programs. The Manzanita Room rents for \$50 to \$66 per hour depending on time and day used.
- The Beaverton City Library has a small stage and auditorium available for use by City departments. The Beaverton Arts Commission uses this space for monthly lectures and some dance demonstrations. The space is well-suited for lectures but the small stage and low ceiling limits its use for performances. The Beaverton City Library lawn is also used by the Commission for outdoor concerts. The City does not allow the sale of tickets for any event using a City facility, which limits the ability of groups to use events to raise revenue.
- A small temporary stage is available at the courtyard of Beaverton Town Shopping Center, but the stage is too small and the space not appropriate for most performances.
- All of Beaverton's high schools have auditoriums that seat up to 600 each. School policy allows the District to cancel any event as late as 24 hours before a scheduled use, so these auditoriums are seldom used by outside groups for performances.
- The Broadway Rose Theater Company has use the auditoriums of Tigard High School in the summer and Tualatin High School over Christmas break for their productions. This Company is interested in finding a space that will allow them to produce seasonal productions year-round.

The five bullet points above pretty much describe the extent of the facilities available in Washington County for performing arts events. This list shows that most of the space used for performances in Washington County were not built for the performing arts or that have limitations on their use in terms of selling tickets or scheduling events. These types of facilities do not allow performing arts organizations to produce high-quality or professional events that generate revenue to support their production. As a result, existing facilities in Washington County do a poor job of supporting an active calendar of performing art events.

The City of Hillsboro is in the process of renovating an old church into the Walters Cultural Arts Center. When it opens in March 2004, the Walters Center will have event space in the main hall that seats 200. Because it is in an old church, this event space has a small stage (16' wide by 21' deep) that is only a couple of feet above the flat-floor seating area. For this reason, the Walters Center will not be ideal for many types of performing arts events,

particularly theater, opera, ballet, orchestra, or any event hoping to attract over 200 people. The City has not yet established rental rates for the event space, but the rates will likely be in the range of \$100 to \$180 per hour depending on the type of group and staffing needed for the event.

REGIONAL FACILITIES

Performing arts organizations that expressed interest in using the Beaverton Cultural Center frequently mentioned four facilities in Portland that they currently use or as examples of high-quality performing arts space:

- The Newmark Theater and Winningstad Theater, operated by the Portland Center for the Performing Arts (PCPA). The PCPA also operates the Keller Auditorium and Arlene Schnitzer Concert Hall, all in downtown Portland.
- Lincoln Hall is operated by Portland State University on their downtown Portland campus.
- Portland Community College has a Performing Arts Center on their Sylvania campus.
- Parkrose High School in northeast Portland is a recently-constructed school with a high-quality performing arts theater that includes a fly tower, orchestra pit, and professional-quality lighting.

Table 3-1 summarizes the seating capacity and rental rates for these facilities. Seating at these facilities ranges from 292 seats at the Winningstad Theater to 916 seats at the Newmark Theater. Facility rental rates for performances ranges from \$610 to \$1,200 for commercial users, with the rate generally increasing with the number of seats. In addition to these base rates, all of the facilities in Table 3-1 charge fees for technical staff, special equipment, stagehands, ticketing, ushers, security, and other services necessary to produce an event at the facility.

Table 3-1. Seating capacity and rental rates at Portland-area performing arts centers

Name	Location	Seats	Rental Rates per Performance		
			Commercial	Non-profit	Rehearsal
Winningstad Theater	Downtown Portland	292	\$610	\$555	\$320
Performing Arts Center	Sylvania Campus	400	\$800	\$650	\$400
Lincoln Hall	Downtown Portland	470	\$650	\$350	\$350
Parkrose High School	NE Portland	600	\$1,200	n/a	n/a
Newmark Theater	Downtown Portland	916	\$1,090	\$980	\$595

Source: ECONorthwest, from material supplied by individual venues.

The commercial performance rates in Table 3-1 range from \$1.20 per seat to \$2.10 per seat, with the rate per seat generally falling as the number of seats increases. The exception is Parkrose High School, which charges a rate equivalent to \$2 per seat for the most popular dates in their 600-seat hall.

Table 3-1 shows that non-profit users get a discount of 10% to 45% of the commercial rate, and that rental rates for rehearsal and load-in/out days is generally 50% of the performance fee. The rental rates shown in Table 3-1 are for evening performances on the most popular days. Most facilities have discounted rates for matinee performances, second performances in the same evening, and performances on less-popular days.

Data provided by Portland State University for the 2001–2002 season shows that their Lincoln Hall was used for a total of 99 performance days and 102 rehearsal days, for a total of 201 use days or 55% of days in the year. About 70% of this use, however, was generated by the University's theater, music, and other departments.

Dan Hays, Theater Manager at the PCC Performing Arts Center, reports 285 use-days per year, a utilization rate of 78%. About 135 of these use days are for PCC theater productions—45 performance days and 90 rehearsal days. The remaining 150 use days are for other campus events and outside rentals. Mr. Hays reports strong demand from organizations that produce dance performances, and the Center is booked solid for these performances in June and September. There is also demand by groups who want to use the PCC Center as rehearsal space. Mr. Hays also reports that the 400-seat PCC facility filled a size niche in the market, and as a result the open dates were fully booked by its third year of operation. There has been some turnover in the groups that use the Center since it opened, with some groups outgrowing the facility and moving on to rent larger halls or developing their own performance space.

Parkrose High reserves time in the theater needed for school classes and events and makes the facility available for rental at remaining times. Staff at Parkrose High School reports that their facility is fully booked during the times it is available for performances, rehearsals, and practices. They have many performing arts groups that rent the hall for annual and seasonal events.

The City of Gresham is in the process of planning for a Community Cultural Center on the Fourier/Larson site in downtown Gresham. This site will include a theater/education building, multi-purpose classrooms, and an outdoor festival plaza for a Farmer's Market and other events. The theater/education building would have a flat floor and seating for 300 on retractable risers. This room could be used for performances, presentations, meetings, social events, and similar uses. The Gresham facility is targeted for opening in 2005.

A feasibility study recently conducted for the Gresham facility¹ found demand for space expressed by local and metropolitan-area performing arts groups. The 29 groups interviewed for that study reported a total potential

¹ BOORA Architects and AMS Planning & Research. *Fourier/Larson Study Site Feasibility Study*. October 1, 2002. Available at http://www.ci.gresham.or.us/departments/des/parksandrec/fourier_larson_study.pdf

use of 48 performances for a 350-seat theater, plus rehearsal and loading days. Most of the groups they interviewed indicated that they preferred a traditional theater with a proscenium stage and fixed seating. Other potential users expressed preference for a smaller studio or “black box” theater with a flat floor and seating on risers.

The feasibility study also found that groups could pay only modest rental fees, estimated at the equivalent of a base fee of \$1 per seat per performance. The projected number of performances and resulting revenue at a Gresham facility was judged insufficient to justify a traditional fixed-seat theater. For this reason, the feasibility recommended a flat-floor flexible 300-seat theater. Most potential users interviewed for that study indicated that such a flexible space would be suitable for performances if it were designed properly and equipped with lighting, scenery handling systems, a resilient dance floor, and quality seating. The recommended theater/education building has 26,350 square feet and is estimated to cost \$11.4 million in 2004 dollars. The addition of optional rehearsal and support space, festival plaza, and site development brings the total cost of the Community Cultural Center to \$17.1 million.

The feasibility study estimated that the Gresham facility could be operated by three full-time staff: a supervisor, scheduling assistant, and theater manager/technical director. This staff, plus part-time staff and benefits, is estimated to cost \$177,000 annually. Administrative overhead and building operations brings the total operating cost to about \$545,000 (including \$100,000 in expenses for classes offered by the City). Revenue generated by use of the Cultural Center, including the Farmer’s Market, is estimated at \$415,000 annually or about 75% of operating costs. The net operating loss of \$130,000 would need to be covered by City funds, an endowment, or some source other than user-generated revenue.

Revenue from use of the theater and rehearsal room was estimated at \$74,200 annually. Theater use was estimated at a total of 224 annual use days or 60% utilization, with 168 performance days and 56 prep days. Use of the smaller rehearsal room for performances and rehearsals was estimated at 200 annual use days or 55% utilization, with 75 performance days and 125 prep days. Base rental rates for performances in the theater were assumed to be \$600 for commercial users and \$300 to \$375 for non-profit users, while the rehearsal room would rent for \$100 to \$125 for non-profit users.

DISPLAY SPACE FOR VISUAL ARTS

As with the performing arts, the Portland area has a lively and active visual arts scene, with hundreds of private galleries as well as public museums that display art as well as displays in informal space such as public buildings and restaurants. And, as with performing arts, there is little space for the display of visual arts in Washington County. A search of art organizations provided by RAAC, the internet, and yellow pages turned up few listings for private galleries in Beaverton or Hillsboro. What space there is in the Beaverton area seems to be primarily in “galleries” that the

Beaverton Art Commission facilitates in public buildings such as St. Vincent Hospital and City Hall.

The Walters Cultural Center being developed by the City of Hillsboro will include gallery and display space for the visual arts. Sean Morgan, Cultural Arts Program Manager for the City, said that the gallery and display space will be primarily used for juried shows and display of work by students and teachers of art classes offered by the Center. He does not expect the gallery to be used extensively for selling visual art works. The City is investing in equipment to create professional-quality display space, including climate controls and flexible hanging systems.

MEETING AND EVENT SPACE

There is a wide variety of space that can serve for meetings, presentations, receptions, ceremonies, and similar events. These types of functions can and do happen in restaurants, hotels, churches, community meeting rooms, park facilities, and private meeting and convention facilities. Much of this space is offered at low cost—space in restaurants and hotels is often free with the purchase of food or lodging for smaller events, and space in churches and community meeting rooms is often available for a modest fee. Facilities that can accommodate large events and those designed specifically for larger meetings, conferences, and similar events have higher rental rates.

According to contacts we interviewed for this study, the primary facilities for meeting space in Washington County are the Greenwood Inn, Kingstad Meeting Center, local hospitals, Embassy Suites, the World Forestry Center, and community rooms in public buildings. In general, the people we interviewed said that there is a shortage of meeting space in Washington County, especially for larger groups with 50 to 500 people. Two respondents noted the lack of meeting space that is not in a hotel.

The Kingstad Center in Beaverton is one of the few facilities in the Washington County area that is specifically designed to support meetings and similar events. This privately-owned facility has one large main room and several smaller flexible rooms that divide into a total of 14 meeting and event spaces. The main Compass Rose room has capacity for 270 in banquet seating and 300 in theater seating. Flexible rooms in the Center can be converted to accommodate groups of 10 to 200. The Kingstad Center offers food service, high-tech audio/visual equipment, a business center, and other event support services. Package pricing at the Kingstad Center is \$20 to \$46 per person depending on the level of food service provided.

The 354-room Embassy Suites Hotel in Beaverton has 15,000 square feet of flexible meeting space with capacity for groups up to 750. The 219-room Greenwood Inn in Beaverton has flexible meeting space that can accommodate groups up to 850 in theater seating or 570 in banquet seating. As with most hotel meeting facilities, the price of the space is negotiated based on the level of food service and lodging needed for the particular use.

The City of Beaverton has several community meeting rooms available in the Beaverton Resource Center, Community Center, and Library. The Resource Center has a large community room that holds 115 and a small room that holds 58. The Community Center has three rooms with capacities of 10, 32, and 105. The Library has three rooms with capacities of 49, 74, and 100, and two of these rooms can be combined for a total capacity of 174. The City rents these rooms for \$100 for three hours or \$150 per day to private organizations; non-profit and government groups get the room free for three hours or \$100 per day.

Staff at the Tualatin Hills Park and Recreation District report that their Jenkins Estate property is booked a full year in advance for wedding receptions. The Jenkins Estate has a Main House with capacity for 125 standing or 70 seated, and a Stable with capacity of 225 standing or 110 seated. The Main House and Stable at the Jenkins Estate each rent for \$450 for six hours on Monday–Wednesday, \$1,200 on Friday or Sunday, and \$1,350 on Saturday. On Saturday and Sunday, the District schedules social events in the main house to allow two events per day.

The proposed Community Center in Gresham will include 750 square foot community meeting room with a capacity for 75 people seated at tables. The feasibility study for this facility assumes that the community meeting room will host about 240 meetings and other events in a stable operating year, generating revenue of \$27,000 or an average of \$115 per event.

Financial Performance of Proposed Beaverton Cultural Center

Chapter 4

This chapter estimates the financial performance of the proposed Beaverton Cultural Center based on assumptions about the level of use, rental rates, and operating costs for the facility. These assumptions are based on the assessment of demand and supply conditions in chapters 2 and 3 of this report, as well as our professional experience in the financial performance of similar facilities. These assumptions will result in an estimate of the net operating revenue generated by use of the facility—gross user-generated revenue minus total operating costs. Operating costs not covered by user-generated revenue will need to be funded by some public or private source.

The assessment of operating performance in this chapter is based on the Performing Arts concept described in the Beaverton Cultural Center Design Program developed by LMN Architects reprinted in Appendix A. This design concept includes a professional-quality performing arts facility with a fly tower, orchestra pit, and lighting. Such a facility supports the widest range of performance types.

The Design Program in Appendix A includes a Community Auditorium concept with many of the same features as the Performing Arts concept but with a more limited performing arts facility. We will comment on the feasibility of the Community Auditorium design concept based on the performance of the Performing Arts concept.

This chapter also reports the construction cost for each of the design concepts developed for the Beaverton Cultural Center, as estimated by LMN Architects. These cost estimates are detailed in Appendix A.

OPERATING PERFORMANCE

This section estimates the level of revenue generated by use of the proposed Beaverton Cultural Center and the total costs needed to operate the facility. The estimates in this section assume stable operation of the facility, which is typically three to five years from opening. Compared to the estimates in this section, the facility will face some higher costs its early years for marketing and inexperience, and reduced revenue as it builds a base of groups that use the facility.

OPERATING REVENUE FROM FACILITY USE

This section estimates the level of revenue that might be generated from use of the proposed Beaverton Cultural Center. The analysis of demand and supply for performing arts space in Chapters 2 and 3 provides several

benchmarks for establishing potential use and rental rates for similar space at the Beaverton Cultural Center:

- Groups that expressed interest in using performing space in Beaverton currently produce a total of 130 performances annually, with additional days needed for rehearsals and preparation. Several of these groups are interested in expanding their number of performances if a facility is available.
- While not all of these performances would happen at the Beaverton Cultural Center, our assessment is that there is demand for performing arts space in the Beaverton area.
- Comparable performing arts facilities in the Portland region report utilization rates of 55% to 78% (days of the year the facility is in use) for performances, rehearsals, and other events. Much of this use, however, is from programs of the educational institutions that operate the facilities.
- A feasibility study for a 300-seat flat-floor theater in Gresham assumed a utilization rate of 60%, with a total of 168 performances per year plus 56 days of rehearsal and preparation.
- Comparable facilities in the Portland region charge base rental rates of \$1.20 to \$2.10 per seat per performance for commercial users. The distribution of price per seat suggests the Beaverton Cultural Center should have a base rate of about \$1.25 per seat per performance, or \$750.
- Organizations we interviewed for this study indicated they would be willing to pay about \$400 to \$800 per show to use a facility like that proposed for the Beaverton Cultural Center. These organizations also expect to pay fees for services and special equipment, which is fairly standard for performing arts facilities.

We use the following assumptions to estimate the level of use and revenue generated by performing arts facilities at the proposed Beaverton Cultural Center:

- A utilization rate for the main hall of 60%, consisting of about 110 performances and an equal number of rehearsal or preparation days per year. This is the equivalent to an average of 2 performances every weekend over the year.
- A utilization rate for the studio/rehearsal space of 30%, with about 20 performances and 90 rehearsal days per year. This space would also be used for meetings and other events, contributing to the low utilization rate for performances and rehearsals.
- A base rental rate of \$750 per performance for commercial users of the main hall, with a 20% discount for non-profit groups and

rehearsal/preparation day rates at 50% of the commercial performance rate.

- A rental rate of \$100 per hour for rehearsals in the main hall for groups that have not reserved the hall for a performance.
- Additional fees for equipment and services primarily covers the costs of this equipment and services, but generates net revenue to the Beaverton Cultural Center equal to 10% of rental revenue.

In addition to revenue from the performing arts space, the Beaverton Cultural Center will produce revenue from renting space and catering commissions for meetings, receptions, and similar events. The design program in Appendix A specifies 1,500 square feet of flexible meeting space plus 900 feet of classroom space for the Beaverton Cultural Center. The flexible meeting space would have two rooms with capacity for about 75 standing and 45 seated at tables. These two rooms could be combined into one large room with double the capacity. The classroom space would have a capacity of about 90 standing or 55 seated at tables. We will use the following assumptions to estimate the level of revenue generated by use of the meeting and classroom facilities at the Beaverton Cultural Center:

- There will be at least 180 meetings, classes, or similar events annually in the Beaverton Cultural Center, lasting an average of two hours each. This represents an average of about one event every other day. In actual operation the frequency of events will vary by season and day of the week, the flexible meeting space proposed for the Cultural Center will up to three uses to occur at once. Given the quality and capacity of meeting space proposed for the Cultural Center, and rental rates comparable to other facilities, we believe the assumed level of meeting use is conservative.
- Based on rental rates at other public facilities, we assume that each of the three meeting spaces at the Beaverton Cultural Center will rent for an average of \$75 per hour. Meetings and events that need the flexible meeting rooms combined into a larger room will pay \$150 per hour for the combined room.
- There will be at least 40 receptions and similar social events at the Beaverton Cultural Center each year, an average of six per month in the May–September period and ten in other months. These events would use the combined meeting room for an average of four hours for each event.
- Receptions and similar social events would pay a base rental rate of \$600 for a four-hour event in the combined meeting room.

Most facilities like the proposed Beaverton Cultural Center assess a patron user fee or ticket surcharge for users of the performing arts space. A patron user fee applies to all attendees at performances regardless of whether tickets are sold—facility users must pay this fee for free

performances. A ticket surcharge applies to ticket sales only. We assumed a patron user fee of \$2 per performance attendee.

The final major revenue stream for operation of the Beaverton Cultural Center will be from food and beverage service. Facilities such as the Cultural Center typically have a list of approved caterers that is provided to groups that rent the facility. Groups make the catering arrangements directly and the caterer pays the facility a commission of 10% to 20% of revenue. The design program in Appendix A includes a 360 square foot catering pantry to support food service in the Cultural Center.

Table 4-1. Assumptions used to estimate user-generated revenue at the Beaverton Cultural Center (stable-year operation)

Assumptions	Amount	Units
Main Hall use	60%	of annual days
Performances	50%	of Main Hall use
Rehearsals	50%	of Main Hall use
Performance rates		
Base rental rate	\$750	per performance, commercial
Discount for non-profits	20%	off base rental rate
% use by non-profits	60%	of Main Hall use
Rehersal rate % base	50%	of base rental rate
Meeting space use		
Meetings	50%	of annual days
avg length	2	hours
Receptions	40	per year
avg length	4	hours
Meeting space rates		
Meetings	\$75	per hour
Receptions	\$150	per hour
Equipment rental revenue	10%	of base rental revenue
Average attendance		
Performances	300	per performance
Meetings	30	per meeting
Receptions	100	per reception
Patron use surcharge	\$2	per performance attendee
Food sales per attendee		
Performances	\$0.25	per attendee
Meetings	\$1.00	per attendee
Receptions	\$5.00	per attendee
Catering commission	20%	of catering revenue

Source: ECONorthwest.

For a rough estimate of food and beverage commission revenue to the Beaverton Cultural Center, we made assumptions about the average attendees per event (300 per performance, 30 per meeting, and 100 per reception) and the average food and beverage sales per attendee (\$0.25 for performances, \$1 for meetings, and \$5 for receptions). We also assumed that the Cultural Center will charge caterers a 20% commission.

Table 4-1 summarizes the assumptions used to estimate user-generated revenue at the Beaverton Cultural Center, and Table 4-2 shows the resulting estimates of user-generated revenue.

Table 4-2 shows estimated user-generated revenue at the proposed Beaverton Cultural Center totals almost \$250,000 once the facility reaches a stable year of operation. Revenue generated by performances makes up 32% of estimated revenue, followed by the patron user fee (27%), rehearsals (16%), meetings (12%), receptions (11%), and catering commissions (3%).

Table 4-2. Estimated user-generated revenue at the Beaverton Cultural Center (stable-year operation, 2003 dollars)

Facility Use	Annual Uses	Average Rate	Total Revenue
Main Hall			
Performances	110	\$660	\$79,860
Rehearsals	110	\$330	\$39,930
Meeting space			
Meetings	180	\$150	\$29,700
Receptions	40	\$600	\$26,400
Patron use surcharge			
Performance attendance	33,000	\$2	\$66,000
Catering commission			\$7,000
Total Revenue			\$248,890

Source: ECONorthwest.

Note: Average rate reflects adjustment to base rental rate for discount to non-profits.

Total revenue includes net equipment rental revenue assumed to equal 10% of facility rental revenue.

We have tried to make reasonable and somewhat conservative assumptions about the level of use and fees charged at the proposed Beaverton Cultural Center. It is likely that actual performance of the facility will vary from the estimates shown in Table 4-2. To estimate the potential range of actual financial performance, we adjusted key assumptions to reflect better or worse performance than the base assumptions shown in Table 4-1. These different assumptions represent possible but less likely conditions for the Beaverton Cultural Center:

- Decreasing the Main Hall use rate from 60% to 50% reduces revenue by \$35,000; increasing the use rate from 60% to 70% increases revenue by a similar amount.
- Changing the ratio of Main Hall use from 50% performances to 40% performances (with the remaining uses as rehearsals) reduces revenue by \$20,000.
- Changing the base rental rate for the Main Hall from \$750 to \$600 reduces revenue by almost \$25,000. Increasing the base rental rate from \$750 to \$900 increases revenue by a similar amount.

- Increasing the discount rental rate for non-profits using the Main Hall from 20% to 30% decreases revenue by almost \$8,000.
- Increasing the use rate for meeting space from 50% to 70%, for a total of 260 meeting events, increases revenue by \$13,000.
- Doubling the number of receptions from 40 to 80 per year increases revenue by \$30,000.

This exercise shows that user-generated revenue at the Beaverton Cultural Center is highly dependent on use of the Main Hall for performances. Modest decreases in the level of use or the rental rate for performances will result in substantial lost revenue to the facility. Given the level of use and fees at other facilities in the Portland area, however, we feel that the assumptions for Main Hall use and fees in Table 4-1 are reasonable and achievable. Our assumptions also leave room for improvement—if the Beaverton Cultural Center can increase the use rate of the Main Hall to 70% and base rental rate to \$900 per performance, it can generate an additional \$75,000 in revenue.

Our analysis of changes in the base assumptions also shows that doubling the number of receptions at the Beaverton Cultural Center results in \$30,000 more revenue. This suggests that the facility operators should create a facility that is attractive for these types of events and aggressively market the facility for this use.

OPERATING COSTS

Costs for labor, including wages and benefits, will be one of the largest cost components of operating the Beaverton Cultural Center. A facility such as the Beaverton Cultural Center will take at least three full-time staff people to operate: a Facility Director, Scheduling/Event Coordinator, and Technical Director. In addition to these full-time staff, some part-time staff will be needed to clean and maintain the Cultural Center.

Events renting the Cultural Center may need to pay facility staff for technical or other assistance to produce their events. Some of this staffing would be on-call for events only, and their costs paid by the facility user. We do not include this reimbursable labor in our estimate of operating cost because the costs are paid by the facility user, not the facility operator.

Operating the Beaverton Cultural Center will also require costs for administrative overhead (marketing, office supplies, postage, phone, copies, etc.) and for building operation (utilities, cleaning, insurance, maintenance, etc.). Our estimate of these costs is shown in Table 4-3, based on the operating costs at similar performing arts facilities in Oregon. The estimates in Table 4-3, particularly for labor benefits, reflects operation of the Beaverton Cultural Center by a private non-profit corporation.

Table 4-3. Estimated operating cost for the Beaverton Cultural Center (stable-year operation, 2003 dollars)

Cost Category	Amount
Labor Costs	\$227,500
Facility Director	\$80,000
Scheduling/Event Coordinator	\$32,000
Technical Director	\$50,000
Part-time staff	\$20,000
Benefits for staff (25% of wage)	\$45,500
Administrative Overhead	\$50,000
Advertising	\$25,000
Office supplies/services	\$15,000
Postage	\$5,000
Phone	\$5,000
Building Operation	\$140,000
Utilities	\$60,000
Contract services	\$30,000
Supplies	\$10,000
Insurance	\$25,000
Equipment and building maintenance	\$15,000
Set-aside for Capital Improvements	\$20,000
TOTAL OPERATING COSTS	\$437,500

Source: ECONorthwest.

Table 4-3 shows total operating cost for the Beaverton Cultural Center at about \$440,000 annually at a stable year of operation. This total is in line with operating costs we have observed at other performing arts and similar facilities:

- The Florence Event Center, which has a 500-seat theater, flexible meeting space, and a gallery for visual arts costs about \$400,000 to operate in 2001–02.
- The feasibility study for the proposed Gresham Community Center estimates their total operating cost at about \$445,000.
- The Hult Center for the Performing Arts reports an operating cost ratio of \$9 per attendee, which would be \$380,000 at the Beaverton Cultural Center based on our assumptions of event attendance.

While it might be possible to operate the Beaverton Cultural Center for less, there is more risk that it will actually cost more. Management will have to work diligently to keep operating costs low.

NET OPERATING REVENUE

Net operating revenue for every performing arts center we are aware of is negative. That is, we do not know of any performing arts facility where revenue generated by rental and other user fees exceeds operating costs—some level of public or private funding and volunteer labor is needed for these facilities to operate.

The estimates in this chapter show that use of the Beaverton Cultural Center will generate almost \$250,000 in revenue or 57% of estimated operating costs. This level of cost recovery is similar to the level at other performing arts facilities, which typically ranges from 40% to 60%.¹ Cost recovery for the proposed Community Center in Gresham was estimated at 75% in the feasibility study conducted for that facility, but their revenue includes heavy use by classes and other City parks and recreation programs and rent from the outdoor plaza.

Our estimate of changes in revenue show that a combination of more performances, a higher base rental fee, and twice the number of receptions could increase revenue by a total of \$90,000. This level of revenue would increase cost recovery to about 75%. This represents a best-case scenario for average cost recovery at the Beaverton Cultural Center.

PERFORMANCE OF COMMUNITY AUDITORIUM CONCEPT

The estimate of operating revenue and costs in this section were based on the Performing Arts Center concept for the Beaverton Cultural Center described in Appendix A. This concept would have an industry-standard professional performing arts theater, which would support a wide range of performance types. The Design Program in Appendix A also describes a Community Auditorium concept with many of the same features at the Performing Arts Center concept, except that the theater would not have a fly tower for scenery or an orchestra pit.

The Community Auditorium concept would have more limitations for performances than the Performing Arts Center concept. In particular, the Community Auditorium facility would not be appropriate for many theater, dance, or opera productions that use drop scenery or live music accompaniment. These types of shows are more likely to draw large audiences and are more willing to pay the full performance rental rate than most other types of performances. Thus, the Community Auditorium concept would not attract as much use and could not charge base rental rates as high as the Performing Arts Concept.

Operating costs for the Community Auditorium concept, however, would not be substantially less than for the Performing Arts Center concept. Many of the main cost components, such as labor and supplies, would be roughly the same with either concept. While the Performing Arts Center would have higher labor costs to set-up the theater for productions, most of these costs would be paid by facility users and so they are not included in the operating cost estimates in Table 4-3. The Community Auditorium concept would have

¹ Cost recovery at other facilities varies by year. When examining operating budgets for performing arts centers, it is important to net out revenue transferred from room tax or other outside services, ticket and other event revenue that is passed through the budget as a revenue and expense, and services provided by the facility owner (often a city or college) such as administration and maintenance.

slightly lower maintenance costs because it would have less specialized performance equipment.

Overall, performing arts space in the Community Auditorium concept would have less use and would charge less for use than space in the Performing Arts Center concept, thus generating less rental revenue for the facility. But, the Community Auditorium concept has roughly the same operating costs. The result is that the Community Auditorium concept is likely to perform worse than the Performing Arts Center concept in terms of operating cost recovery.

PERFORMANCE OF OTHER FACILITY OPTIONS

One potential to create a space with lower construction and operating costs is to reduce the number of seats in the Performing Arts Center or Community Auditorium concept from 600 to 400. Revenue in a smaller facility would decline relative to the level shown in Table 4-2 from fewer performances, fewer attendees, and lower fees, while operating costs would be similar, resulting in poorer financial performance relative to a 600-seat hall for either facility concept.

The City of Gresham has proposed building a Gresham Community Center which would have a flexible flat-floor space with seating on retractable risers that would serve as a 300-seat theater or meeting space. A feasibility study for this facility² estimates their total operating cost at about \$445,000. Cost recovery for the proposed Community Center in Gresham was estimated at 75% or about \$335,000, resulting in a operating deficit of \$110,000. However, revenue at the Gresham facility includes heavy use by City parks and recreation programs. This facility would probably not generate as much revenue without these City programs, resulting in poorer financial performance than estimated in the feasibility study.

CONSTRUCTION COSTS

The Design Program in Appendix A provides a detailed cost estimate for the proposed Beaverton Cultural Facility. The Design Program estimated costs for two types of facilities:

- A Performing Arts Center concept, which includes a proscenium stage with a fly tower and orchestra pit, at \$20.7 to \$21.2 million in 2004 dollars.
- A Community Auditorium concept, which would have an auditorium stage without the fly tower and orchestra pit, at \$15.6 to \$16.4 million in 2004 dollars.

² BOORA Architects and AMS Planning & Research. 2002. *Fourier/Larson Site Feasibility Study*. Prepared for the City of Gresham. October. http://www.ci.gresham.or.us/departments/des/parksandrec/fourier_larson_study.pdf

Both of these concepts would have a 600-seat theater with lighting equipment, multi-purpose meeting and classroom space, a visual arts gallery, lobby, and support space. The primary difference between the two concepts is the range of performances they support. The Performing Arts Center would have an industry-standard stage for a full range of productions, although the hall would be too small for a full Broadway production or similar performance. The Community Auditorium stage would not have a fly tower or orchestra pit, limiting its use for theater, dance, and similar productions that use drop scenery or live music accompaniment.

The construction cost estimates in Appendix A does not include costs for land or parking, in part because the Foundation hopes to partner with the Beaverton School district, City of Beaverton, or other entity that would donate a site. Purchasing land could add another \$2 million in costs for the facility, with another \$500,000 to develop on-site surface parking.

To help put these cost estimates in context, the feasibility study conducted for the proposed Community Center in Gresham estimated that their theater/education building would cost \$11.4 million. This would be a flexible flat-floor space with seating on retractable risers that would serve as a 300-seat theater or meeting space. The costs for the Gresham facility do not include land costs because the site was donated to the City of Gresham.

The Gresham facility would have half of the seating and be more limited for performance use than the concepts developed for the Beaverton Cultural Center. Together, the two Beaverton facility concepts and the Gresham facility establish a range of potential facility types and construction costs Beaverton might consider for the Cultural Center.

Design Program

Appendix A presents the full report by **LMNARCHITECTS**, *Beaverton Cultural Center: Summary and Design Program*.

BEAVERTON CULTURAL CENTER

summary
and
design program

December 9, 2003

LMNARCHITECTS

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Introduction

Based upon the firm's experience of comparable facilities, LMN Architects was asked to prepare a design program and cost estimate for a six hundred seat multi-purpose facility that could serve as the principal community venue for performing arts, large meetings, speakers, visual arts exhibits and similar activities outlined in the Vision Statement of the Beaverton Arts Foundation.

The report about that is outlined in two main parts. The first is a summary of LMN's conclusions as to the size, scale and cost of a facility that would meet the needs that are implied by the vision statement. The second part contains the design program for two alternative concepts.

The first concept outlined is a facility that would include a multi-purpose performing arts theater, meeting rooms and gallery space for visual arts exhibits. The multi-purpose theater would be equipped with a fly tower and a full compliment of theatrical rigging over the stage plus an orchestra pit. The theater with its stage house, counterweight rigging system and orchestra pit would provide the capability to present musicals, drama, and dance performances that utilize scenery and backdrops that can be raised out of sight above the stage and other commonly used theatrical technology. The orchestra pit would provide the capability for live musical accompaniment for dance performance and musicals. This type of theater could be said to be the industry standard for community theater use because of its flexibility and its widespread utilization.

There is an important caveat that needs to be identified with regard to the performing arts center concept. The height of the main mass of a theater of the type described could be in the range of forty five to fifty feet and the fly tower would be approximately eighty feet in height. The Beaverton zoning code has a height limitation of thirty five feet and although there is some provision for increased height under the provisional use procedure of the code, there is no guarantee that a permit could be obtained.

A second concept is for a community auditorium facility that should be able to be accomplished within the city's zoning constraints. It would include a large meeting room, a classroom, an exhibit gallery and a community auditorium with a large stage but no fly tower. The auditorium concept would be completely functional for music, lecturers, speakers, audio visual presentations and drama and dance performances utilizing limited stage and scenic elements. It would not incorporate the theatrical staging capabilities of the performing arts center theater; however it would be equipped with motorized rigging pipes over the stage for theatrical lighting and dead-hung scenery. While it has limitations, a facility of this type would be highly utilized.

The summary includes a magnitude-of-cost capital estimate for each concept based upon anticipated square foot costs for building programs of this type and size. Since no design work has been carried out to date, the consulting team has prepared this estimate of potential building costs based upon LMN Architects' experience and data base of similar projects.

PROGRAM AREA COMPARISONS

	Multi-purpose theater area s.f.	Auditorium scheme area s.f.
THEATER		
Seating	6,000	6,000
Stage	2,625	2,625
Loading/set-up	600	600
Orchestra pit (40 musicians)	600	
Control booth	180	180
Follow Spot Booth	160	160
Piano Storage	72	72
Shell Storage	200	
Music Stands & Chairs Storage	100	100
SUPPORT SPACE		
Dressing Rooms		
Double	280	
Chorus (12 actors)	920	920
Wardrobe	240	
Green Room	240	240
Tech Office & Crew	200	200
Production office	200	200
Administrative Offices	800	800
Backstage Toilet	50	50
Storage	420	420
Maintenance Shop	300	300
LOBBY	4,200	4,200
Concessions storage	120	120
Toilets (female)	800	800
Toilets (male)	300	300
House Manager	150	150
Box Office	200	200
Net Area	19,957	18,637
Gross Area Factor	1.55	1.55
GROSS BUILDING AREA, sq. ft.	30,933	28,887
MEETINGS WING		
Lobby	300	300
Classroom	900	900
Sub-dividable meeting room	1,500	1,500
Exhibit Gallery	1,200	1,200
Gallery storage/curatorial	480	480
Pantry	360	360
Storage	360	360
Net Area	5,100	5,100
Gross Area Factor	1.4	1.4
GROSS BUILDING AREA, sq. ft.	7,140	7,140
TOTAL BUILDING AREA sq. ft.	38,073	36,027

Capital costs estimate

In 2004 dollars, it is estimated that a project of this type of a quality that would be appropriate for a community cultural facility in the Beaverton, Oregon area would have general construction costs of approximately \$300 to \$325 per square foot for a community auditorium facility and approximately \$375 to \$385 for a multi-purpose performing arts facility. In addition to this there would be costs of permits, design fees, surveys, geo-technical analysis, project management, legal expenses, furniture-fixtures & equipment, contingencies and other items generally termed "soft costs". Soft costs for a project of this type range from 40% to 50% of the "hard cost" of construction. Since Oregon does not have a local sales tax, LMN would expect the soft costs for the project to be in the middle of the range, say 45%. Total project costs are the sum of hard costs and soft costs. It is therefore anticipated that the total project costs, excluding land, to be in the range of \$435 to \$457 per square foot in 2004 dollars for a community auditorium project and \$544 to \$558 for a multi-purpose performing arts center. Using the mid-point in those ranges would equate to a \$16 million project cost for a community auditorium concept project and \$21 million for a performing arts center concept project. It is recommended that planning be based upon reasonably conservative expectations because without a design and a physical site, there are considerable unknowns.

	Area s.f.	\$ / s.f.	Total Project cost
COMMUNITY AUDITORIUM CONCEPT	36,027	435	\$15,671,745
	36,027	457	\$16,464,339
PERFORMING ARTS CENTER CONCEPT	38,073	544	\$20,772,712
	38,073	558	\$21,244,734

The estimate includes paving and landscape immediately around the building.

This estimate does not include the cost of land or parking.

A project of this scale would require a site of approximately 1.2 acres for the building and space immediately around it, zoning set backs, etc.

The area required for parking would depend upon the site, city requirements and the operator's philosophy.

Appendix

Performing arts center concept design program	page 6
Community auditorium concept design program	page 18

The program spaces described in the notes that follow are the basic industry standard requirements for a 600 seat multi-purpose theater that would be designed to accommodate both natural acoustic music and amplified music, dance performances, musicals, drama and speakers. The room and functional areas are typical of facilities found across the country that serve community arts organizations, colleges and universities. The facility would accommodate the needs of small touring ensembles of the type that serve the regional market area and smaller productions of the major regional arts organizations. It would not be large enough for touring Broadway shows or large symphony orchestras. It would be highly suitable for jazz and small classical ensembles. It would be sufficient in size and technical capacity for most drama performances. It would be an excellent dance space although the stage would be small for a full scale Nutcracker performance or other ballet performances requiring a very large stage. It would be a first rate community theater and equal in quality to many theaters on Broadway in New York. The program is a preliminary model that could be developed in detail when the project advances to the next step.

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Skagit Valley
Performing Arts
and
Conference
Center

DESIGN
DEVELOPMENT
100% SET
01-15-02

REVISION
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7

FRONT-OF-HOUSE and PUBLIC SPACES

ENTRY FOYER

Canopy over the main entry to provide weather protection for patrons as they enter the theater. The covered entry should be designed to accommodate automobile drop-off of patrons.

Entry foyer to provide weather protection and sound lock between lobby area and outside environment.

LOBBY

FUNCTIONAL ACTIVITY

The lobby serves a number of purposes in addition to its function as a gathering space for audience members prior to the start of a performance and during intermissions. It also serves the function of establishing a transition between the outside world and the theater within. To this end, it is important that it be dramatic to signify that one has arrived at a special place where something extraordinary may occur. The lobby is a threshold into the theater space and as such, it helps establish the character of the theater.

- Amenities should include restrooms, toilets, concessions, telephones, educational and informative displays, as well as house manager services such as ADA listening devices, wheelchair seating arrangements and seating assistance.
- There should be accommodations for latecomers including a video stage monitor.
- Stage monitors at the doors into the theater should be provided for house staff and ushers to keep track of the performance.
- There should be some limited bench seating.
- It is very desirable for pedestrians and passersby to be able to see into the lobby space. This helps make the activity of the theater have a positive impact on the street and district of which it is a part.
- It is desirable to have wall space or cases for display and informative materials such as the program of events and performers scheduled in the facility, biographical material and photographs of the performers.
- Works of art can make a significant contribution to the character of the theater lobby.
- Retail sales area and fixtures for gifts and memorabilia should be provided in an attractive and flexible manner because this is an important revenue source for presenting and performing organizations.
- A gift shop is a desirable feature of the lobby and a revenue-generating component for presenting and performing groups. To this end, the gift shop/retail space should be flexible.
- Lobby space should be on multiple levels to match seating levels and should be proportionally distributed.

SPATIAL RELATIONSHIPS

Design to provide smooth audience flow into the theater from the lobby and entry spaces. .

AREA REQUIREMENTS

Provide a minimum of 7 sq. ft. of lobby space per seat in the theater for audience assembly plus space for toilets, coat storage, front of house support and for stairs and elevators. If possible increase the space in the lobby to 8 sq. ft. per person.

CONCESSIONS

FUNCTIONAL ACTIVITY

Concession counters should be located at the main lobby level. They should be designed to provide multiple points of service to facilitate serving a large number of people within a limited period of time, such as a twenty-minute intermission. A concession storage and preparation space is required in proximity to the main lobby.

SPATIAL RELATIONSHIPS

Locate concession counters so as to provide adequate space for circulation within the lobby taking account of cueing space. Locate away from theater entry doors and sound lock doors.

AREA REQUIREMENTS

The floor area for concessions is included in the lobby calculations

CONCESSIONS STORAGE

A concession storage and preparation space is required in proximity to the main lobby.

AREA REQUIREMENTS

Area requirements (storage & prep.): 120 sq. ft.

TOILETS

FUNCTIONAL ACTIVITY

Toilets should be located at each level and be easily accessed from the lobby and the theater hall. The provision should exceed the minimum code requirements, which are significantly less than adequate. Toilets for each sex should be provided on both sides of the lobby.

AREA REQUIREMENTS

For 600 seats:

8 female toilet fixtures min.: recommend 16 @ 50 sq. ft. = 800 sq. ft.

4 male toilet fixtures min.: recommend 6 @ 50 sq. ft. = 300 sq. ft.

BOX OFFICE

FUNCTIONAL ACTIVITY

Adequate space required for a minimum of 2 ticket windows, one of which is to be wheelchair accessible. Ample queuing space at each window location should be provided...

SPATIAL RELATIONSHIPS

The box office should be visible and accessible from the exterior and be adjacent to the entrance. If it is accessible from the Foyer ticket sales can occur without opening the main lobby.

AREA REQUIREMENTS

Area requirements: 200 sq. ft.

HOUSE MANAGER OFFICE

FUNCTIONAL ACTIVITY

The house manager is responsible for audience needs and activities when they are in the lobby area and for the work of the ushers. Office space is required for normal administrative work, a desk, a filing cabinet and a small conference table and chairs.

SPATIAL RELATIONSHIPS

The House Manager's office should be adjacent to the lobby.

AREA REQUIREMENTS

Area requirements: 150 sq. ft.

HOUSE – PERFORMANCE SPACE

AUDITORIUM

FUNCTIONAL ACTIVITY

Configuration

To support the range of performance types and styles that are typically desired in community theaters, the recommended configuration is a theater based upon the American Broadway theaters of New York. Although smaller than the theaters that serve as venues for touring Broadway shows, in other respects the theater type proposed is a close match. The theater should be a proscenium style house with an orchestra pit and a fly tower above the stage to be equipped with a counterweight rigging system.

To provide a quiet room for speech and music, a noise criteria rating of NC20 maximum is required. To accommodate amplified music and speakers, it is necessary to provide the means to reduce the reverberation time of the room. This is most easily accomplished by incorporating retractable acoustic draperies.

Theatrical Lighting Catwalks

Two lighting catwalks are to be incorporated within the space above the audience seating area to provide theatrical lighting at appropriate angles to the stage.

Seating

Ideally there would be at least two levels of seating; however two balconies are even better. The main orchestra level of seating in a six hundred seat multi-purpose hall would accommodate approximately four hundred seats, the balcony accommodating two hundred seats. In an opera house configuration that would bring more people close to the stage, the orchestra level seating would be approximately four hundred seats with a first balcony seating one hundred twenty and the second balcony seating eighty people. Either continental or conventional seating layouts are workable.

Sightlines should be designed so that the entire stage area level including the extension of the stage over the orchestra pit is visible from both the balcony and orchestra.

SPATIAL RELATIONSHIPS

The house-lobby relationship should provide for entry into both sides of the auditorium in a clear, easily understood manner through sound and light-lock vestibules.

AREA REQUIREMENTS

Approximately 10-sq. ft. per seat should be provided. This area provides for light and sound locks and circulation within the room. See space summary.

STAGE

FUNCTIONAL ACTIVITY

The best stage configuration solely for music performances is an end-stage arrangement with a slightly projecting stage apron, however a multi-purpose hall which is used for dance or musicals where elaborate scenery is utilized and a pit orchestra is employed, the proscenium style stage with a fly tower is the standard type.

The proscenium opening should be approximately forty feet wide and twenty seven feet high. The opening would be masked down to about thirty to thirty feet in width for most drama productions.

The stage floor should be resilient for actor's and dancer's needs. The most practical surface for a floor that must accommodate musical theater as well as orchestra is a battleship linoleum covering.

TECHNICAL SYSTEMS

Counterweight rigging system
Rigging gridiron located seventy feet above the stage.
Fly gallery located thirty feet above the stage floor
Loading gallery located five feet below the gridiron
Fire curtain
Theatrical draperies
Acoustic draperies
Orchestra shell
Performance sound system
Production intercom system
Theatrical lighting system and controls
Theatrical lighting instruments

AREA REQUIREMENTS

The stage should be thirty five feet deep measured from the proscenium wall to the back wall. Very little wing space is required for music performances; however dance requires a minimum of fifteen feet. A good workable overall stage size including wings would be 35 feet by 75 feet.

ORCHESTRA PIT

FUNCTIONAL ACTIVITY

The pit should accommodate a minimum of about forty musicians and a conductor. The pit can be partially under the stage apron. The pit throat should be no less than about seven feet in dimension.

Ideally there should be a mechanical lift to either close off the pit and add seats or to extend the stage area when the pit is not being used in a performance. A lift also is commonly used to facilitate access to lower level piano and chair storage and to transport the piano and other equipment to the stage.

AREA REQUIREMENTS

Area requirement: 600 sq. ft.

CONTROL BOOTH

FUNCTIONAL ACTIVITY

Located at the back of the house with good sight lines, the control booth should accommodate both lighting and sound control technicians, as well as TV technicians plus space for a stage manager.

AREA REQUIREMENTS

Area requirements: 180 sq. ft.

FOLLOW SPOT BOOTH

FUNCTIONAL ACTIVITY

A follow spot booth should be provided on each side of the control booth. These booths can double as crying-rooms.

AREA REQUIREMENTS

Area requirements: Provide two at 80 sq. ft. each.

BACK-OF-HOUSE SUPPORT SPACE

Elevator

An elevator is required for ADA access if there is seating or functional spaces on a second floor or balcony level. An elevator or lift is also required for the orchestra pit and trap room.

PRINCIPAL/STAR DRESSING ROOMS

FUNCTIONAL ACTIVITY

Dressing room for a principal or a star performer.

The room could alternatively accommodate dressing for two performers.

Dressing counter (20 inches in depth) and mirror, 36 inches per dressing station (provide two pairs), side by side.

Hanging space for costumes and clothing, 2 @ 48 inches wide by 24 inches in depth.

Private bathroom with shower, wc and lavatory basin.

Electric power for hairdryers, etc.: 2 counter-height 110v duplex outlets total 4 min.

Stage sound monitor.

Lockable.

SPATIAL RELATIONSHIPS

Locate in very close proximity to the stage.

AREA REQUIREMENTS

Area requirements: provide 2 @ 140 sq. ft. each

CHORUS DRESSING ROOMS

FUNCTIONAL ACTIVITY

Dressing room for twelve performers each.

Dressing counter (20 inches in depth) and mirror, 36 inches per dressing station.

Space for costumes/clothing racks 20 @ 36 inches wide by 24 inches in depth.

Bathroom with shower, wc and lavatory basins for male and female performers.

Electric power for hairdryers, etc.: counter height 110v duplex outlets, total 12 min.

Stage monitor.

Lockable.

SPATIAL RELATIONSHIPS

Locate in proximity to the stage. Dressing can be configured as one large area divided by a curtain to create unequal size dressing areas to correspond to production needs.

AREA REQUIREMENTS

AREA REQUIREMENTS

Provide 2 for twelve actors @ 460 sq. ft. each room.

WARDROBE

FUNCTIONAL ACTIVITY

Costume handling area including fitting, sewing repairs, ironing, laundry and hanging racks.

Natural light is desirable.

Ventilation of room and exhaust of two clothes dryers is required.

Space and power required for at least one washer and two dryers.

SPATIAL RELATIONSHIPS

Locate in close proximity to the dressing rooms.

AREA REQUIREMENTS

Minimum area requirements: 240 sq. ft.

GREEN ROOM

FUNCTIONAL ACTIVITY

The function of the green room is primarily a lounge for work breaks and waiting space for actors when they are off the stage, however it also serves numerous other functions ranging from a place to provide meals for actors between a matinee and evening performance, as a place for actors to meet friends, family or audience members, warm-up, overflow-dressing and so on. It should be equipped with a small kitchen sink and counter arrangement and power for coffee makers, microwave and fridge.

SPATIAL RELATIONSHIPS

The Green Room should be located in very close proximity to the stage and be designed to be sound proof. It should also have the possibility of access from the theater without going through the dressing room area.

AREA REQUIREMENTS

Minimum area requirements: 240 sq. ft.

TECH OFFICE

FUNCTIONAL ACTIVITY

Office space is required for the full-time house technical director to carry out administrative work including desk, filing cabinet, drawing board, and small conference table space.

SPATIAL RELATIONSHIPS

This area could be in very close proximity to the stage.

AREA REQUIREMENTS

Minimum area requirements: 120 sq. ft.

PRODUCTION OFFICE

FUNCTIONAL ACTIVITY

Flexible office space for two people to use during a performance run. Typically this will be the production manager and head stagehand. Desk and computer space is required as well as shelving and additional chairs.

SPATIAL RELATIONSHIPS

Locate adjacent to the stage

AREA REQUIREMENTS

Minimum area requirements: 200 sq. ft.

ADMINISTRATIVE OFFICE AREA

FUNCTIONAL ACTIVITY

Space is required for the Manager of the theater for business that must be conducted within the theater such as financial settlement at the end of performances. Space for staff who will be responsible for marketing, promotions, rentals, finance, accounting and general administrative and clerical functions will be located elsewhere.

SPATIAL RELATIONSHIPS

This area could be provided outside the theater building but in close proximity in City-owned or commercial office space

AREA REQUIREMENTS

The staff numbers could range from four to six or more for a theater of this type and the minimum area required would range from 800 to 1,200 sq. ft. depending upon the management organization and structure.

Provide 800 sq. ft. only within the theater, see summary matrix.

BACK STAGE TOILETS

Provide a unisex toilet in the backstage area at stage left and stage right, accessible through a sound lock.

AREA REQUIREMENTS

Minimum area requirements: 50-sq. ft. each.

STORAGE

A minimum area of dedicated, lockable storage room should be provided in addition to all the found-space that will be used for this purpose.

AREA REQUIREMENTS

Provide a minimum of 420 sq. ft.: see summary

RECEIVING & SHOP

Space adjacent to loading dock for scenery, props and costume handling. Space for short term storage of trunks and hampers. This area will also be used for some assembly, repair and touch-up of scenery and properties. A secure tool storage area and small shop should be provided adjacent to the receiving area. It should be equipped with a service sink. 110v and 220 v power.

AREA REQUIREMENTS

Provide a minimum of 600 for scenery and equipment handling and storage plus 300 sq. ft. for repairs shop.

LOADING DOCK

Truck dock wide enough to accommodate two tractor-trailer rigs plus access to dumpster/trash/garbage/recycling containers.

Dock to be at same level as stage floor and approximately 42 inches above driveway.

Dock to be sound isolated from stage.

SPATIAL RELATIONSHIPS

Locate adjacent to the stage wings or adjoining set-up/assembly space.

AREA REQUIREMENTS

Minimum area requirements: 280 sq. ft.

MEETINGS and EXHIBIT GALLERY SPACES

FRONT-OF-HOUSE and PUBLIC SPACES

ENTRY FOYER

Canopy over the entry to provide weather protection for patrons as they enter this wing. The covered entry should be designed to accommodate automobile drop-off of patrons.

Entry foyer to provide weather protection and sound lock between lobby area and outside environment.

LOBBY

FUNCTIONAL ACTIVITY

The lobby provides pre-function assembly space for meeting room and classroom users. It also serves the exhibit gallery to enable it to function independently of theater performance activities.

SPATIAL RELATIONSHIPS

Design to provide smooth audience flow into the spaces from the lobby and entry spaces. .

AREA REQUIREMENTS

Provide a minimum of 300 sq. ft. of lobby space for these three areas plus space for toilets, coat storage and reception.

EXHIBIT GALLERY

FUNCTIONAL ACTIVITY

Secure exhibit gallery for display of art works. Filtered indirect natural light desirable. Independent temperature and humidity control should be provided.

SPATIAL RELATIONSHIPS

The exhibit gallery should be visible and accessible from the main lobby.

AREA REQUIREMENTS

Area requirements: 1,200 sq. ft.

EXHIBIT STORAGE / CURATORIAL SPACE

FUNCTIONAL ACTIVITY

Secure space for uncrating art works and preparing them for exhibit.

SPATIAL RELATIONSHIPS

Should be part of the same environment as the gallery space and ideally adjoining to the gallery.

AREA REQUIREMENTS

Area requirements: 480 sq. ft.

MEETING ROOM

FUNCTIONAL ACTIVITY

Meetings, speakers, pre-performance functions, banquets, receptions and similar activities. Provide a movable partition that is sufficiently sound reducing to allow simultaneous use of the two spaces.

SPATIAL RELATIONSHIPS

Design to provide smooth audience flow from the entry and from the theater lobby.

AREA REQUIREMENTS

Provide a room of 1500 sq. ft. that can be sub-divided into two approximately equal spaces

CLASSROOM

FUNCTIONAL ACTIVITY

Multi-purpose room for classes ranging from art to dance.

SPATIAL RELATIONSHIPS

Design to provide visible access from lobby.

AREA REQUIREMENTS

Provide a room of 900 sq. ft.

CATERING PANTRY

FUNCTIONAL ACTIVITY

Pantry to serve caterers providing food and beverage to functions within the facilities. Provide space for commercial refrigerators, warming ovens, microwave, dish washing, food assembly and plating, sinks and work top area. No cooking will occur within pantry.

SPATIAL RELATIONSHIPS

Design to provide service access from loading dock without going into backstage production spaces of theater. Provide back-of-house access to pre-function spaces.

AREA REQUIREMENTS

Provide a room of 360 sq. ft. and a storage area of the same size in close proximity.

PERFORMING ARTS & CONFERENCE CENTER PROGRAM AREAS

				Multi-purpose theater area s.f.
THEATER				
Seating	600	@	10	6,000
Stage	35	X	75	2,625
Loading/set-up	20	x	30	600
Orchestra pit (40 musicians)	40	@	15	600
Control booth	9	x	20	180
Follow Spot Booth	2	x	80	160
Piano Storage				72
Shell Storage				200
Music Stands & Chairs Storage				100
SUPPORT SPACE				
Dressing Rooms				
Double	2	@	140	280
Chorus (12 actors)	2	@	460	920
Wardrobe				240
Green Room				240
Tech Office & Crew				200
Production office				200
Administrative Offices				800
Toilet				50
Storage				420
Maintenance Shop				300
LOBBY	600	@	7	4,200
Concessions storage				120
Toilets (female)	16	@	50	800
Toilets (male)	6	@	50	300
House Manager				150
Box Office				200
Net Area				19,957
Gross Area Factor				1.55
GROSS BUILDING AREA, sq. ft.				30,933
MEETINGS WING				
Lobby				300
Classroom				900
Sub-dividable meeting room				1,500
Exhibit Gallery				1,200
Gallery storage/curatorial				480
Pantry				360
Storage				360
Net Area				5,100
Gross Area Factor				1.4
GROSS BUILDING AREA, sq. ft.				7,140
TOTAL BUILDING AREA sq. ft.				38,073

Design program – Community Auditorium Concept

The program spaces described in the notes that follow are the basic industry standard requirements for a 600 seat community auditorium that would be designed to accommodate both acoustic music and amplified music as well as spoken word and audio visual presentations. The room and functional areas are typical of facilities found across the country that serve community arts organizations, colleges and universities. The facility would accommodate the needs of small touring ensembles of the type that serve the regional market area and productions of the major regional arts organizations that feature small ensembles and limited scenery requirements. It would not be large enough for large symphony orchestras or suitable for performances that require a stage equipped with a fly tower and counterweight rigging system. It would be very suitable for jazz and small classical ensembles. It could be used for dance and drama productions that could work within the technical constraints of an auditorium stage. Although it would not have a stage-house tower to fly out large backdrops, it would be equipped with overhead rigging pipes for lighting and dead-hung scenery. The program is a preliminary model that could be developed in detail when the project advances to the next step.

The facility illustrated below is an example of a community auditorium of this type. Somewhat larger, at seven hundred fifty seats, it accommodates orchestral performances and is the home of a summer music festival.



Door Community Auditorium
www.dcauditorium.org

Fish Creek, Wisconsin

FRONT-OF-HOUSE and PUBLIC SPACES

ENTRY FOYER

Canopy over the main entry to provide weather protection for patrons as they enter the theater. The covered entry should be designed to accommodate automobile drop-off of patrons.

Entry foyer to provide weather protection and sound lock between lobby area and outside environment.

LOBBY

FUNCTIONAL ACTIVITY

The lobby serves a number of purposes in addition to its function as a gathering space for audience members prior to the start of a performance and during intermissions. It also serves the function of establishing a transition between the outside world and the auditorium within. To this end, it is important that it be dramatic to signify that one has arrived at a special place where something extraordinary may occur. The lobby is a threshold into the performance space and as such, it helps establish the character of the theater.

- Amenities should include restrooms, toilets, concessions, telephones, educational and informative displays, as well as house manager services such as ADA listening devices, wheelchair seating arrangements and seating assistance.
- There should be accommodations for latecomers including a video stage monitor.
- Stage monitors at the doors into the theater should be provided for house staff and ushers to keep track of the performance.
- There should be some limited bench seating.
- It is very desirable for pedestrians and passersby to be able to see into the lobby space. This helps make the activity of the theater have a positive impact on the street and district of which it is a part.
- It is desirable to have wall space or cases for display and informative materials such as the program of events and performers scheduled in the facility, biographical material and photographs of the performers.
- Works of art can make a significant contribution to the character of the theater lobby.
- Retail sales area and fixtures for gifts and memorabilia should be provided in an attractive and flexible manner because this is an important revenue source for presenting and performing organizations.
- A gift shop is a desirable feature of the lobby and a revenue-generating component for presenting and performing groups. To this end, the gift shop/retail space should be flexible.
- Lobby space should be on multiple levels to match seating levels and should be proportionally distributed.

SPATIAL RELATIONSHIPS

Design to provide smooth audience flow into the auditorium from the lobby and entry spaces. .

AREA REQUIREMENTS

Provide a minimum of 7 sq. ft. of lobby space per seat in the auditorium for audience assembly plus space for toilets, coat storage, front of house support and for stairs and elevators.

CONCESSIONS

FUNCTIONAL ACTIVITY

Concession counters should be located at the main lobby level. They should be designed to provide multiple points of service to facilitate serving a large number of people within a limited period of time, such as a twenty-minute intermission. A concession storage and preparation space is required in proximity to the main lobby.

SPATIAL RELATIONSHIPS

Locate concession counters so as to provide adequate space for circulation within the lobby taking account of cueing space. Locate away from theater entry doors and sound lock doors.

AREA REQUIREMENTS

The floor area for concessions is included in the lobby calculations

CONCESSIONS STORAGE

A concession storage and preparation space is required in proximity to the main lobby.

AREA REQUIREMENTS

Area requirements (storage & prep.): 120 sq. ft.

TOILETS

FUNCTIONAL ACTIVITY

Toilets should be located at each level and be easily accessed from the lobby and the theater hall. The provision should exceed the minimum code requirements, which are significantly less than adequate. Toilets for each sex should be provided on both sides of the lobby.

AREA REQUIREMENTS

Area requirements:

For 600 seats:

8 female toilet fixtures min.: recommend 16 @ 50 sq. ft. = 800 sq. ft.

4 male toilet fixtures min.: recommend 6 @ 50 sq. ft. = 300 sq. ft.

BOX OFFICE

FUNCTIONAL ACTIVITY

Adequate space required for a minimum of 2 ticket windows, one of which is to be wheelchair accessible. Ample queuing space at each window location should be provided...

SPATIAL RELATIONSHIPS

The box office should be visible and accessible from the exterior and be adjacent to the entrance. If it is accessible from the Foyer ticket sales can occur without opening the main lobby.

AREA REQUIREMENTS

Area requirements: 200 sq. ft.

HOUSE MANAGER OFFICE

FUNCTIONAL ACTIVITY

The house manager is responsible for audience needs and activities when they are in the lobby area and for the work of the ushers. Office space is required for normal administrative work, a desk, a filing cabinet and a small conference table and chairs.

SPATIAL RELATIONSHIPS

The House Manager's office should be adjacent to the lobby.

AREA REQUIREMENTS

Area requirements: 150 sq. ft.

USHERS ROOM

No provision.

HOUSE – PERFORMANCE SPACE

AUDITORIUM

FUNCTIONAL ACTIVITY

Configuration

To support the range of performance types and styles that are typically desired in a community auditorium, the recommended configuration is an auditorium based upon the classical shoebox shaped concert halls that have proven acoustics. Although smaller than the type of facility that would accommodate a full symphony orchestra, it would be ideal for smaller ensembles. The theater should have an end stage configuration without a proscenium arch.

To provide a quiet room for speech and music, a noise criteria rating of NC20 maximum is required. To accommodate amplified music and speakers, it is necessary to provide the means to reduce the reverberation time of the room. This is most easily accomplished by incorporating retractable acoustic draperies on the side walls and in the catwalk area above the audience.

Theatrical Lighting Catwalks

A lighting catwalk is to be incorporated within the space above the audience seating area to provide theatrical lighting at appropriate angles to the stage.

Seating

Ideally there would be at least two levels of seating. The main orchestra level of seating in a six hundred seat auditorium would accommodate approximately four hundred seats, the balcony accommodating two hundred seats. This configuration that would bring more people close to the stage to create a sense of intimacy. Either continental or conventional seating layouts are workable.

Sightlines should be designed so that the entire stage area is visible from both the balcony and orchestra.

SPATIAL RELATIONSHIPS

The house-lobby relationship should provide for entry into both sides of the auditorium in a clear, easily understood manner through sound and light-lock vestibules.

AREA REQUIREMENTS

Approximately 10-sq. ft. per seat should be provided. This area provides for light and sound locks and circulation within the room. See space summary.

STAGE

FUNCTIONAL ACTIVITY

The best stage configuration solely for music performances is an end-stage arrangement with a slightly projecting stage apron.

The stage should be approximately fifty feet wide and twenty seven feet high. The stage opening would be equipped with movable or hinged side tower panels to facilitate masking down the stage opening to about thirty feet in width for drama productions or smaller ensembles.

The stage floor should be resilient for actor's and dancer's needs. The most practical surface for a floor that must accommodate musical theater as well as orchestra is a battleship linoleum covering.

TECHNICAL SYSTEMS

Motorized rigging and lighting pipes
Dead-hung rigging and lighting pipes
Theatrical draperies
Acoustic draperies
Performance sound system
Production intercom system
Theatrical lighting system and controls
Theatrical lighting instruments

AREA REQUIREMENTS

The stage should be thirty five feet deep measured from the proscenium wall if a large combined band and chorus ensemble is to be accommodated. Very little wing space is required for music performances; however dance requires a minimum of fifteen feet. A good workable overall stage size including wings would be 35 feet by 75 feet.

CONTROL BOOTH

FUNCTIONAL ACTIVITY

Located at the back of the house with good sight lines, the control booth should accommodate both lighting and sound control technicians, as well as TV technicians plus space for a stage manager.

AREA REQUIREMENTS

Area requirements: 180 sq. ft.

FOLLOW SPOT BOOTH

FUNCTIONAL ACTIVITY

A follow spot booth should be provided on each side of the control booth. These booths can double as crying-rooms.

AREA REQUIREMENTS

Area requirements: Provide two at 80 sq. ft. each.

BACK-OF-HOUSE SUPPORT SPACE

Elevator

An elevator is required for ADA access if there is seating or functional spaces on a second floor or balcony level. An elevator or lift is also required for the orchestra pit and trap room.

PRINCIPAL/STAR DRESSING ROOMS

FUNCTIONAL ACTIVITY

Dressing room for a principal or a star performer.

The room could alternatively accommodate dressing for two performers.

Dressing counter (20 inches in depth) and mirror, 36 inches per dressing station (provide two pairs), side by side.

Hanging space for costumes and clothing, 2 @ 48 inches wide by 24 inches in depth.

Private bathroom with shower, wc and lavatory basin.

Electric power for hairdryers, etc.: 2 counter-height 110v duplex outlets total 4 min.

Stage sound monitor.

Lockable.

SPATIAL RELATIONSHIPS

Locate in very close proximity to the stage.

AREA REQUIREMENTS

Area requirements: provide 2 @ 140 sq. ft. each

CHORUS DRESSING ROOMS

FUNCTIONAL ACTIVITY

Dressing room for twelve performers each.

Dressing counter (20 inches in depth) and mirror, 36 inches per dressing station.

Space for costumes/clothing racks 20 @ 36 inches wide by 24 inches in depth.

Bathroom with shower, wc and lavatory basins for male and female performers.

Electric power for hairdryers, etc.: counter height 110v duplex outlets, total 12 min.

Stage monitor.

Lockable.

SPATIAL RELATIONSHIPS

Locate in proximity to the stage. Dressing can be configured as one large area divided by a curtain to create unequal size dressing areas to correspond to production needs.

AREA REQUIREMENTS

Area requirements: provide 2 for twelve actors @ 460 sq. ft. each room.

GREEN ROOM

FUNCTIONAL ACTIVITY

The function of the green room is primarily a lounge for work breaks and waiting space for actors when they are off the stage, however it also serves numerous other functions ranging from a place to provide meals for actors between a matinee and evening performance, as a place for actors to meet friends, family or audience members, warm-up, overflow-dressing and so on. It should be equipped with a small kitchen sink and counter arrangement and power for coffee makers, microwave and fridge.

SPATIAL RELATIONSHIPS

The Green Room should be located in very close proximity to the stage and be designed to be sound proof. It should also have the possibility of access from the theater without going through the dressing room area.

AREA REQUIREMENTS

Minimum area requirements: 240 sq. ft.

TECH OFFICE

FUNCTIONAL ACTIVITY

Office space is required for the full-time house technical director to carry out administrative work including desk, filing cabinet, drawing board, and small conference table space.

SPATIAL RELATIONSHIPS

This area could be in very close proximity to the stage.

AREA REQUIREMENTS

Minimum area requirements: 200 sq. ft.

PRODUCTION OFFICE

FUNCTIONAL ACTIVITY

Flexible office space for two people to use during a performance run. Typically this will be the production manager and head stagehand. Desk and computer space is required as well as shelving and additional chairs.

SPATIAL RELATIONSHIPS

Locate adjacent to the stage

AREA REQUIREMENTS

Minimum area requirements: 200 sq. ft.

ADMINISTRATIVE OFFICE AREA

FUNCTIONAL ACTIVITY

Space is required for the Manager of the theater for business that must be conducted within the theater such as financial settlement at the end of performances. Space for staff that will be responsible for marketing, promotions, rentals, finance, accounting and general administrative and clerical functions will be located elsewhere.

SPATIAL RELATIONSHIPS

This area could be provided outside the theater building but in close proximity in City-owned or commercial office space

AREA REQUIREMENTS

The staff numbers could range from four to six or more for a theater of this type and the minimum area required would range from 800 to 1,200 sq. ft. depending upon the management organization and structure.

Provide 800 sq. ft. only within the theater, see summary matrix.

BACK STAGE TOILETS

Provide a unisex toilet in the backstage area at stage left and stage right, accessible through a sound lock.

AREA REQUIREMENTS

Minimum area requirements: 50-sq. ft. each, see summary matrix.

STORAGE

A minimum area of dedicated, lockable storage room should be provided in addition to all the found-space that will be used for this purpose.

AREA REQUIREMENTS

Provide a minimum of 420 sq. ft.

RECEIVING & SHOP

Space adjacent to loading dock for scenery, props and costume handling. Space for short term storage of trunks and hampers. This area will also be used for some assembly, repair and touch-up of scenery and properties. A secure tool storage area and small shop should be provided adjacent to the receiving area. It should be equipped with a service sink. 110v and 220 v power.

AREA REQUIREMENTS

Provide a minimum of 600 for scenery and equipment handling and storage plus 300 sq. ft. for repairs shop.

LOADING DOCK

Truck dock wide enough to accommodate two tractor-trailer rigs plus access to dumpster/trash/garbage/recycling containers.

Dock to be at same level as stage floor and approximately 42 inches above driveway.

Dock to be sound isolated from stage.

SPATIAL RELATIONSHIPS

Locate adjacent to the stage wings or adjoining set-up/assembly space.

AREA REQUIREMENTS

Minimum area requirements: 280 sq. ft.

MEETINGS and EXHIBIT GALLERY SPACES

FRONT-OF-HOUSE and PUBLIC SPACES

ENTRY FOYER

Canopy over the entry to provide weather protection for patrons as they enter this wing. The covered entry should be designed to accommodate automobile drop-off of patrons.

Entry foyer to provide weather protection and sound lock between lobby area and outside environment.

LOBBY

FUNCTIONAL ACTIVITY

The lobby provides pre-function assembly space for meeting room and classroom users. It also serves the exhibit gallery to enable it to function independently of theater performance activities.

SPATIAL RELATIONSHIPS

Design to provide smooth audience flow into the spaces from the lobby and entry spaces. .

AREA REQUIREMENTS

Provide a minimum of 300 sq. ft. of lobby space for these three areas plus space for toilets, coat storage and reception.

EXHIBIT GALLERY

FUNCTIONAL ACTIVITY

Secure exhibit gallery for display of art works. Filtered indirect natural light desirable. Independent temperature and humidity control should be provided.

SPATIAL RELATIONSHIPS

The exhibit gallery should be accessible from the main lobby.

AREA REQUIREMENTS

Area requirements: 1,200 sq. ft.

EXHIBIT STORAGE / CURATORIAL SPACE

FUNCTIONAL ACTIVITY

Secure space for uncrating art works and preparing them for exhibit.

SPATIAL RELATIONSHIPS

Should be part of the same environment as the gallery space and ideally adjoining to the gallery.

AREA REQUIREMENTS

Area requirements: 480 sq. ft.

MEETING ROOM

FUNCTIONAL ACTIVITY

Meetings, speakers, pre-performance functions, banquets, receptions and similar activities. Provide a movable partition that is sufficiently sound reducing to allow simultaneous use of the two spaces.

SPATIAL RELATIONSHIPS

Design to provide smooth audience flow from the entry and from the theater lobby.

AREA REQUIREMENTS

Provide a room of 1500 sq. ft. that can be sub-divided into two approximately equal spaces.

CLASSROOM

FUNCTIONAL ACTIVITY

Multi-purpose room for classes ranging from art to dance.

SPATIAL RELATIONSHIPS

Design to provide visible access from lobby.

AREA REQUIREMENTS

Provide a room of 900 sq. ft.

CATERING PANTRY

FUNCTIONAL ACTIVITY

Pantry to serve caterers providing food and beverage to functions within the facilities. Provide space for commercial refrigerators, warming ovens, microwave, dish washing, food assembly and plating, sinks and work top area. No cooking will occur within pantry.

SPATIAL RELATIONSHIPS

Design to provide service access from loading dock without going into backstage production spaces of theater. Provide back-of-house access to pre-function spaces.

AREA REQUIREMENTS

Provide a room of 360 sq. ft. and a storage area of the same size in close proximity.

AUDITORIUM & CONFERENCE CENTER PROGRAM AREAS

				Auditorium area s.f.
THEATER				
Seating	600	@	10	6,000
Stage	35	X	75	2,625
Loading/set-up	20	x	30	600
Control booth	9	x	20	180
Follow Spot Booth	2	x	80	160
Piano Storage				72
Music Stands & Chairs Storage				100
SUPPORT SPACE				
Dressing Rooms				
Chorus (12 actors)	2	@	460	920
Green Room				240
Tech Office & Crew				200
Production office				200
Administrative Offices				800
Toilet				50
Storage				420
Maintenance Shop				300
LOBBY	600	@	7	4,200
Concessions storage				120
Toilets (female)	16	@	50	800
Toilets (male)	6	@	50	300
House Manager				150
Box Office				200
Net Area				18,637
Gross Area Factor				1.55
GROSS BUILDING AREA, sq. ft.				28,887
MEETINGS WING				
Lobby				300
Classroom				900
Sub-dividable meeting room				1,500
Exhibit Gallery				1,200
Gallery storage/curatorial				480
Pantry				360
Storage				360
Net Area				5,100
Gross Area Factor				1.4
GROSS BUILDING AREA, sq. ft.				7,140
TOTAL BUILDING AREA sq. ft.				36,027